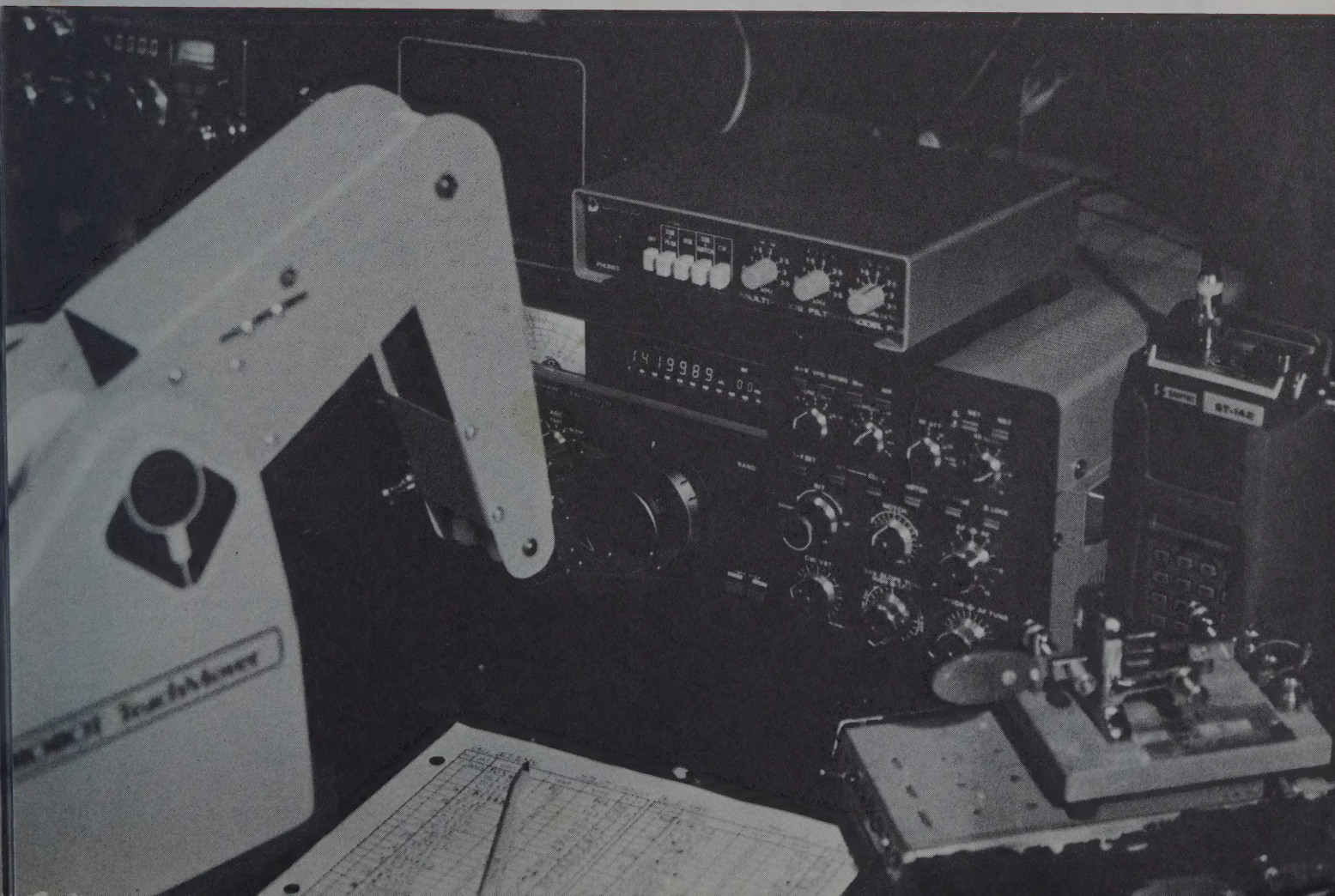
INTN'L MONTHLY MAGAZINE - BY AND FOR ACTIVE RADIOAMATEURS

RADIOSPORTING

NOVEMBER 1984 $1.50

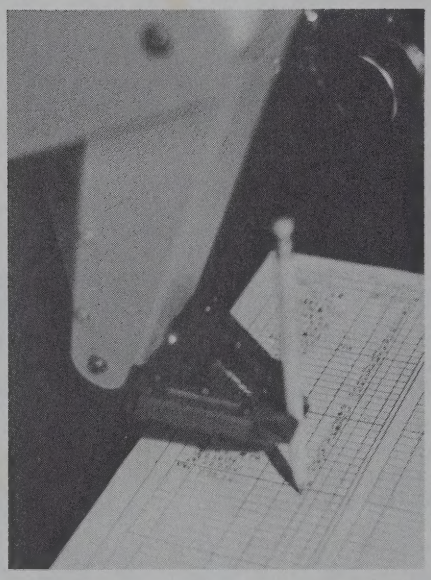
IN THIS ISSUE

The tough life of Radio Robot	2	Why Records?	18
VE3BMV Radiotorial	3	CQ WW DX Contest All Time Records	19
Radio Waves	4	CQ WW DX Contest Rules	20
Contest News	6	Contest Rules, W1WY	23
DX News	7	FCC News, W4GF	28
Kermadec Expedition 1984, ZL1BQD	8	Emergency/Traffic K4ZN	30
Electronic Pizzaz, VE3HGN	10	Introducing W4GF	31
Introducing. . . KH6BZF, K4TWJ	11	Errata 1983 CQ WW Contest	31
Closer look at ICOM 751, K4TWJ	12	Next issue of Radiosporting	31
Propagation	14	Classified Ads	31
KH6BZF Propagation Record	15	Advertising	32
Notes on CQ WW '84 Phone Contest	17	International Radiosport Association	36



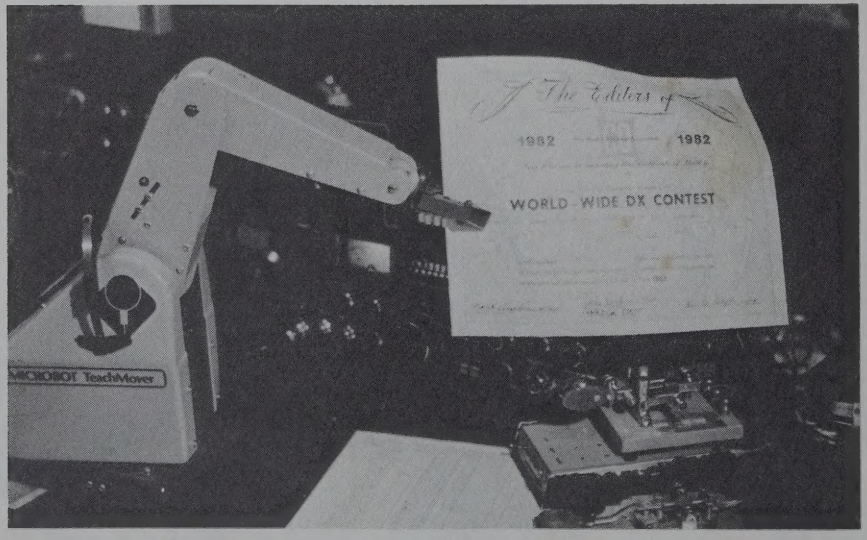
THE TOUGH LIFE OF A RADIO ROBOT

We started as a Single op., but ended up as a single hand. My Old Man fell asleep. Those human are so unreliable, they can't even last through a crumy contest. I just had to continue on my own. At least he wasn't getting in my way and snorring didn't bother me a bit. I put on the narrow CW filter. It was fun! It could have been better if my OM had designed the station, so a Robot can operate it better. Computer interface for tuning the radio, computer keying and computer logging would have helped. This way I had to do it the old human - inefficient way. Tune the radio manually (almost unscrewed my wrist), watch the blinking dials (terrible on my photocells) and send with the hand keyer (uuugh).



Logging those contacts was something else. Ever tried to do everything with one hand? What a pain! Almost tore my cables. The worst thing was when I worked one of those guys who sign their call sign only once during the contest. I ran out of memory to keep track of their frequencies, what lids! Next time I work them, I won't send my call either, just report. That will teach them! Those cheap pencils kept drying-up on me and the paper kept moving across the table. Next year the OM better get some computer stuff going.

When my OM woke up, the contest was over. He looked in the log and said: "not bad for one hand". He rewarded me with one lousy bottle of Henninger Export. Boy, did that ever cool my transistors and stepping motors! All the suffering in the contest was worth it.



I think he is going to get me a brother or two. Then we can really whip those Caribbean boys! When "we" received the certificate, he gave me another bottle of Henninger. "We" were world high on 20 m CW in CQ WW. I've got the certificate in my hand as you can see!

The CQ Contest Committe is having an emergency session, trying to figure out into what category I fit. Is it Single OP - three hands? (Apparently only humans can be licensed hams.) Is it Multi OP? Will we Robots get a special category? Will somebody send me a diskette with new rules? Hopefully we'll see you this year on 40m, maybe even on phone if I get my speach synthesizer going.

Yours truly: V-Robot E-Robot 3-Robot B-Robot M-Robot V-Robot +

VE3BMV RADIOTORIAL . . .

FINALLY! Here it is, the premiere issue of RADIOSPORTING. As any other normal and healthy newborn kid on the block, it took a lot of pain and labour. First I have to apologize for slipping the promissed date of the first issue. We do not have the huge paid staff and production machinery that established magazines have. But we do have lots of enthusiasm and love for our hobby, its sports side and above all, determination to make it against all the odds! Personally, I have decided and committed myself to offer all I can to make this magazine high quality reading for sports minded hams - contesters, DXers, VHF and just about anybody who is involved in daily activities.

Unfortunately, my professional commitments, and some technical obstacles forced me to delay the first publication. But things are getting organized, computers and other necessary gadgets are coming on board, so things should get smoother. Also, more people are offering to help, write articles, organize and coordinate some events we are planning, etc. It will take us a few more issues to settle on the format and features. We appreciate any comments and constructive criticism. Our aim is to a have short lead time from the closing of the issue - to your door in about 5 - 10 days, so you will get fresh and latest information.

From talking to many contesters and DXers, I have found that we need the type of publication that will cater to our specific needs, has a short lead time and quality material showing us how to do better. We would like RADIOSPORTING pages to be the forum for sharing ideas and experiences. There is still a lot to be discovered. What a better way than contests to test and prove new antenna designs, or learn more about the propagation. The DXers and contesters are few and far appart. This magazine should brings us together. We understand each other; we will enjoy sharing our experiences and also have some fun.

The RADIOSPORTING will be a chronicle and record of our competitive and casual achievements. Computers will help us to collect and tabulate various scores, results and records. We are dedicated to promote quality, ham spirit, courtesy, fair play and sportsmanship, this is our only "bias". We want to preserve our hobby for ourselves and our children and we do not want to see it deregulated down to CB mess. We have a number of projects in works. We would like to increase the awarenes of the general public and the rest of the ham radio community to the operating aspects of our hobby and elevate it to the same status as the other sports enjoy. This will help others to understand what we do, how we can help and that there is a bit more to us than "unsightly towers". We hope to bring in more young people to our hobby by showing them that there is more to radio than just talking about the weather.

We feel there is a need for an independent organization that can bring us sportsmen together and by having the most experienced and reputable executives, we can lead the way and try to maintain peace and happiness on the bands. From those needs the IRSA - International Radio Sport Assn. was born. For now its made up of volunteers who kindly agreed to help. At Dayton 1985 we will have our annual meeting and elections of officers for the next term. We are looking for volunteers willing to participate in IRSA and events sponsored by IRSA.

Some of the objectives that IRSA will pursue are: Promotion of international friendship and goodwill through sportsmanship and radio contesting. To improve the quality of operating, equipment design, antennas, promote and publicize ideas and achievements of leading operators. To promote amateur radio contesting and other related activities as a sport, and to provide the publicity and recognition it deserves in the public media. We can make recomendations and advise various national organizations on matters of importance to all of us. IRSA will sponsor World Contest Championship, where top scoring stations in major selected international contest will accumulate points towards the championship score. More details will be announced in the next issue. Companies and individuals wishing to donate the trophies, please contact us.

In order to promote our IRSA we are looking for people willing to man the IRSA booth at the hamfests in your local area. Please let us know if you are willing to do so, and we will supply the necessary material.

If you have received a complimentary issue of RADIOSPORTING, it is because we think that you are active and might be interested in subscribing and supporting our efforts. Please consider it to be an invitation to join us. This is just a start. We would like the RADIOSPORTING to become a high quality magazine dedicated to quality in Amateur Radio. We hope that you will enjoy reading it and also from time to time contribute to it. If you become dissatisfied, we will refund your unused portion of the subscription.

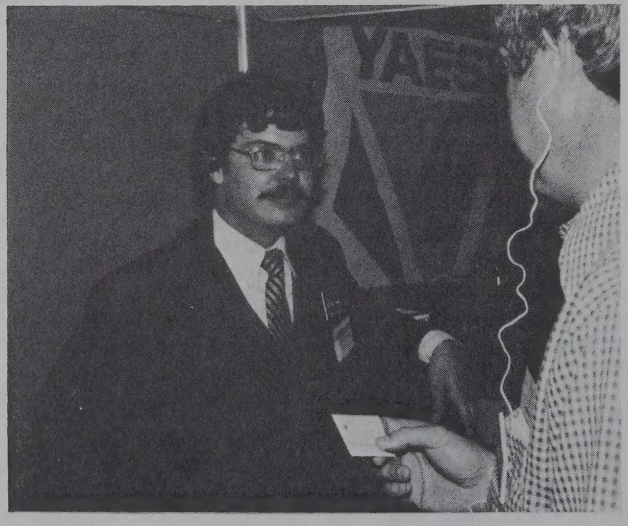
We hear complains from fellows non-contesters during the contests, we also hear complaints about the DXpeditions creating the pile-ups. Sure they disturb "scheduled" rag-chews, nets, etc. But I think this is the salt of radio. Look what happened to the new Oscar - not exactly crowded. First there was a ban on contests through it, then we saw contest in order to stimulate some activity. Another, perhaps better example is the new 10 MHz band. I have yet to hear more than 2-3 stations at any one time on that band. Isn't it because the DXCC and contests are discouraged on it? Where are all those who needed that extra band? (We contesters sure need another band like a hole in the head. Six is bad enough, no room on that overloaded tower anyway.) Perhaps those new bands should be primarily used by the computer communicators, packet radios, RTTY, etc. Why don't we have some contests and competitions using those specialized modes on those bands? How about a contest of computerized stations - robots? Technology is here, could be fun and interesting technology could come out of it.

Just finished CQ WW Phone operation on 40 m monoband. Probably the worst band we have, broadcast station QRM, narrow slot for DX, split frequency operation, CW and RTTY insisting on having fun right in the middle of European opening. My ears still hurt. Around Sunday noon I confirmed my feelings about my "stretched" (from 29 to 54 ft boom) 3 el. Telrex beam, it probably resonates about 200 kHz below the band. K2UU told me the dimensions of the stubs for 46 vs. 29 foot boom and spoiled my last year of operating on 40 m. It wasn't bad though but, could have been better. So the beam will come down to be retuned. At least the CW part of CQ WW will run with a properly tuned antenna. Let's see if we can improve last year's score. There we go again - a never ending process of learning. But that's what keeps us so fascinated with contesting. See you all on 40m CW!

RADIO WAVES

This must be the best looking BY operator! It was a great pleasure for many at Dayton Hamvention to meet Chip Margelli, K7JA, who also operated from BY1PK and gave many the "new one". He is Vice President, Amateur Division, YAESU Musen Corp.

Chip is one of the best contesters around, has won ARRL sweepstakes and CQ WW DX Contest many times. He was one of the W7RM Multi-Multi gang and has operated a number of DXpeditions. Chip can be usually found at YAESU booth, where he is busy answering many questions.



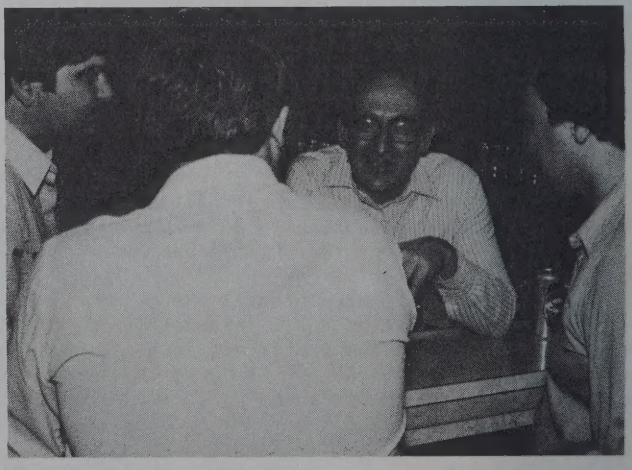
Here Chip, K7JA is trying to explain to some hard of hearing amateur (2m hearing aid?), that all he gets, is his business card. In order to get BY1PK QSL, you have to work him on HF and not just listen on a hearing aid.

Every year over 24.000 radioamateurs go to Radio Mecca - Dayton OH, to participate in the yearly Hamvention. We are treated to a huge flea market, commercial exhibits, various forums and presentations, but above all - to meet the old friends and tell old lies. It is the experience of the year.

WANTED! For stealing the World, and many North American records. Last seen at Dayton. The one on the left keeps saying "fivenineoeight", the one on the right alternates between "fivenineoeight" and "fivenineofive". They are on the loose and hard to catch. A reward is offered to anyone who can lock them up for the contest weekend (not in their shacks, for goodness sake!).

The one on the left is identified as NP4A, Pedro Pizza, alias KP4Q, KP4AST, one of Desecheo gang, winner of many contests and holder of World and continental records. Pedro has built a super Multi-Multi station, located on the top of the hill above an old copper mine in Puerto Rico.

The one on the right calls himself K1DG, Doug Grant, who set World record from HI8 in Multi-Single category and was one of the principal operators at the famous W2PV Multi-Multi station. "Victim" of zoning law, Doug is limited in puting anything decent up in the air. He usualy operates contests from other stations or from warmer areas in the winter. Doug gave a hillarious "TV News" presentation at 1984 Dayton Contest Forum.

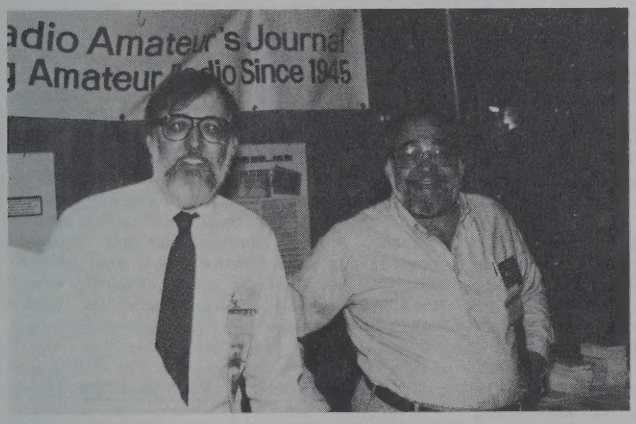


It's 3 o'clock AM, Dayton, hospitality suite. Randy Thompson, K5ZD (right) is trying to find out from Gene Walsh, N2AA, how do you build those aluminum curtains that shield Texas from the Europeans. Both often fight for top honors in Multi-Multi category from K2GLs and N5AUs installations.

Congratulations to Randy and XYL Connie for getting married on August 18. That's it for the "single" operator! Randy is building his own set-up after moving into his new QTH. Good Luck!!

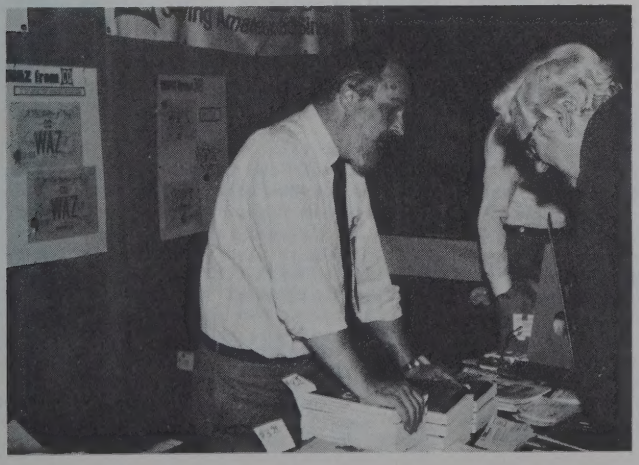
Wanna buy a tower? Or is it broadband vertical? Or trophy? Or a new mobile antenna? Or just simply "stacked" Coor's. One thing is for sure: an airplane should not hit it. There is a strobe light on the top. Whatever it is, it's at Dayton, and ARlA sure attracted attention with this thing on the top of the van.

Those who have never been to Dayton Hamvention and flea market sure missed a lot of fun. They have things there that you thought never existed.



Here are the CQ Boys: Publisher Dick Ross, K2MGA (left) and Advertising Manager Jack Gutzeit, W2LZX at the CQ Magazine booth at Dayton. Editor Alan Dorhoffer, K2EEK (below) is trying to refuse an offer.

CQ Magazine sponsors the world's biggest and best contests - CQ WW DX Contest and WPX Contest. CQ, the Contest Committee and their chiefs: K3EST, N6AR, W1WY and N8BJQ deserve our thanks for the excellent job they do to keep them going.



N4AR, Dr. Bill Maxson is apologizing to competitors for beating them up in the contests. He says that he did not mean to beat them. All he wanted "was to have some fun".

Bill is a cardiologist in Lexington, KY. His excellent signals are known all over the bands, because of the excellent antenna farm. Bill is a quiet and unassuming man who listens to everyone and draws upon their experiences as well as his own. He prefers CW and is primarily a DXer, who through his activity has developed a great working knowledge of propagation modes. In the contest, Bill will usually do single op himself, but the station is often run Multi-Single in CQ WW CW. The crew that assembles has a spirit of comaraderie that makes contesting fun.

The equipment used at N4AR is modified Drake lines, assorted amplifiers and ten towers ranging from 40 to 194 feet in height, mostly Rohn 25G, 45G, 55G and three of the military surplus AB105. They cover 1½ acres and support a total of 116 HF elements on 25 booms (not including wire antennas).

Bill and his crew hold the current US Multi-Single all time record in CQ WW CW Contest. N4AR sets an outstanding example of the ethical operating technique, through which he encourages others in the best contester spirit. (K8CC, NCJ)

W9JUV, Joe Schroeder (left), Assistant Editor, and K2RR, Rich Rosen, Editor in Chief, are manning the Ham Radio magazine booth at Dayton.

Ham Radio is the best technical magazine among ham radio publications. Continuing the legacy of late Jim Fisk, W1HR, Rich is doing an excellent job in keeping the quality of magazine for all those who are not just "appliance" operators.

CONTEST NEWS

CQ WW DX CONTEST CHANGES.

Complete rules are published in this issue and they are much the same as those in the past. The disqualification criteria have been tightened and spelled out in detail. Better watch those dupes and avoid a cut in your score, or maybe disqualification.

A new category, Team Contesting, has been added on a trial basis. Your comments are very much appreciated. Especially, consider its merits and significance.

The trophy list has been brought up to date with some deletions and the addition of new sponsors to fill the vacancies. More trophies are expected to be announced as they become available.

The eligibility clause for consecutive winning of awards has been reduced by one year. It is now two years instead of the previous three years.

Logs from CQ WW Contest can no longer be sent to the individual Contest Directors. This year they must all go to: CQ Magazine, WW DX CONTEST, 76 North Broadway, Hicksville, NY 11801, USA. Be sure to indicate phone or CW on the envelope.

Few omissions and errors sneaked into the awards lists in the 1983 CQ WW Contest results. A thorough check will be made and corrections will be announced. (W1WY)

SPONSOR CQ 160 METER CONTEST TROPHY!

1985 CQ 160 meter contest is getting closer. The rules are being drawn up and will be announced in the December issue of CQ Magazine. No drastic changes are anticipated at this time. CQ is running short of trophy sponsors. The West Gulf DX Club will no longer be sponsoring the awards for the US on CW and SSB. World Champion Memorial awards have been also vacated. There are four spots now available, six if you include the multi operator division, which has never had a trophy award.

This is an open invitation to all you faithful top-band contesters to come forward and follow the example of Don Busick, K5AAD, who has been donating the European awards for many years. (W1WY)

N. TEXAS CC VIDEO TAPE

Paul Clampit, K5TCK, has produced a 40 minute video tour of the North Texas Contest Club. Various club members are featured with highlights of big guns KN6M/5, K5RR, and N5AU. Cost is $20 postage paid and includes the VHS cassette. To order contact K5TCK. (NCJ)

WØUA NEW CHAIRMAN ARRL CAC

George Schultz, WØUA has been appointed the new chairman of the ARRL Contest Advisory Committee. George is a many times winner of ARRL Sweepstakes and well known "Zero" who frequently operates KØRF station. We wish George all the best in his new position and may he bring some fresh wind into the CAC.

CONTESTER CODE OF ETHICS

The ARRL Contest Advisory Committee has been requested by the Board of Directors to draft a "Contest Code of Ethics". WØUA is suggesting the following and looking for comments:

THE CONTESTER IS SKILLFUL
He realizes that the ultimate end to his competitive endeavors is the continuing improvement of his technical knowledge and operating skills, and he strives for excellence in both.

THE CONTESTER IS HONEST
He believes in honorable competition and observes all contest rules as well as regulations for amateur radio in his country. He submits true and accurate reports of his competitive activities.

THE CONTESTER IS HELPFUL
He is willing to share the experience and expertise he has gained through competition to help further the skills of others. He is eager to introduce newcomers to the excitement and enjoyment of competitive amateur radio.

THE CONTESTER IS CONSIDERATE
In his competitive efforts, he is constantly aware that he shares the spectrum with fellow amateurs pursuing widely diverging interests, and takes special care not to encroach upon or interfere with them.

THE CONTESTER IS FRIENDLY
He treats contesters and non-contesters alike with courtesy, consideration, and respect. He conducts himself in a manner to enhance the image of competitive amateur radio, and to attract others to the sport.

THE CONTESTER IS DIPLOMATIC
He knows that the signals he transmits are heard around the world, and avails himself of this unique oportunity to further the interests of international goodwill through competitive sport.

THE CONTESTER IS RESPONSIBLE
He realizes that he is an amateur first, and places the goals and purposes of the Amateur Service before his competitive endeavors. He is ever prepared to utilize his skill and experience to serve the public and his fellow amateurs. (NCJ)

1982 CANADIAN CONTEST CHAMPIONSHIP

Due to VE3KZ absence (over at VP2KBZ) and expanded format of CCC, the final results were delayed. There were 241 participants in the overall championship, 163 in single band category, 133 in Phone, 100 in CW and 37 in the Multi-op competition.

The overall winner phone/cw is VE3KZ, with 184 points. The CW Trophy goes to VE6OU and Phone Trophy goes to VE3BMV.

Regional Awards go to: VO1QU, VE2ZP, VE3BVD, VE4RF, VE5RA, VE6CNV, VE7BTV, VY1DD.

The single band category was won by VO2CW. Multi-operator winner is VE7ZZZ - Prince George Zulu Contest Club.

CCC rules are based on placement in selected contests during the calendar year and points are accumulated depending on stations place in the particular contest.

The Canadian Contest Championship was started by VE3BMV and currently administered by VE3KZ. CANAD-X is sponsoring the trophies and plaques for the winners.

DX/CONTEST FORUM AT 1984 RSO CONVENTION

The annual Radio Society of Ontario Convention was held at Westin Hotel in Ottawa, ON on October 5-7. Packed DX/Contest forum put together by moderator Dave Goodwin, VE2ZP and featured well known amateurs:

VE1ASJ, Andy McLelan showed slides and talked about the latest DXpedition and experiences of CYØSPI - St.Paul Isl.

Video Tapes were shown on operation of XU1SS, Okino-Torishima (the scaffold island) and hillarious tapes produced by Kansas City DX Club - Contest Night Live and Tonganoxie Island - Country #316.

VE3QA, Hal Parsons talked about latest decisions of the DX Advisory Committe.

VE2FU, Phil and VE2HQ, Noel showed the results of their years of slavery on the towers. Slide presentation on their Multi-Multi station set-up gave excellent perspective on hard work involved.

VE3BMV, Yuri talked about the present situation on the bands, contesting, IRSA and Radiosporting magazine.

VE3KKB, Doug showed the slides about "The Rise and Fall of VE3PCA".

Next year the RSO Convention is sponsored by London ARC and will be held in October in London, ON.

VE2HQ MULTI STATION

Noel, VE2HQ and Phil, VE2FU have build remarkable station for contesting. Over past few years going through number of antenna designs and "growing" towers, the task is close to completion. They are hoping to fire up this contest season. All is home brewed and towers range from 160 footer and 4 el. 40 m beam, stacked 6 el. KLMs on 20 m, etc. Noel is looking for operators to fill Multi-Multi crew.

NEW TEAM CATEGORY IN CQ WW CONTEST

For the first time this year, the CQ Contest Committee has come up with a new "TEAM" competition category. Modelled on the NCJ Sprint Contest Team competition, this category requires 5 stations in the single operator category, but the team must operate from two continents. The list of team members must be submitted to CQ on the 15th of the contest month.

Makes you wonder what good it does to our team spirit of contesting. "Where's the beef?" Any ideas or comments? Drop a line to CQ WW Contest Committee.

Perhaps a better way to team contesting would be to have a team from an area (province, state, region, city, etc.) where they would put up one station in each category that is formaly recognized in the contest, from single op, single bands, QRP, all the way to Multi-Multi. The scores would be added up, and the total score would be entered into the Club Team Competition. I think this would make more sense, it would encourage more stations to participate and be an indicator of how good the club is. This would also help to "grow" more of local contest operators. Any supporters? IRSA is! (VE3BMV)

CQ WW CONTEST MULTIPLIERS

Don't forget that in the CQ WW Contest multipliers are not only DXCC countries (even "unrecognized" ones like XZ9A count), but also WAE countries count: IT, GM Shettland, 4U1VIC, UN1.

DX NEWS

A35MP, Tonga
is active on 14.228 around 1200Z trying to maintain daily schedule. He is located on Vava'u Isl. (OC-64 for IOTA) and has been heard working Europeans at 0830Z. Another active station is A35SA around 14.220 0515Z, 14.297 1000Z. A35EB was worked on 14.264 0400Z.

A6 - United Arab Emirates
Dennis Shepherd, G3LCS has confirmed to members of the Chiltern DX Club that his departure for A6 is imminent and that his new boss, a member of of the A6 royal family, holds the call A61AA. Denis believes that there is every reason to expect that he will be able to operate.

BVØW, Taiwan
South Florida DX Assn group active on CW and SSB all bands. QSL via W4WJ.

BY5RA, China
is in skeds with DU9RG on 14180 at 1200Z on Wednesdays and Saturdays, occasionaly on Fridays. He is also active daily 14030 or 21030 from 1330Z.
BY1PK is QRV on RTTY with equipmnt provided by JA1BPK who may go to China soon to operate it.

CEØAA/X, San Felix Isl.
This operation is joint venture by the Chilean Navy and the Radio Club of Chile and it should last through the early part of November. Two operators, Max and Fernando operate on SSB mostly from lists, while CW they manage on their own! They have very little Amateur Radio experience, but they are doing quite well and they are very active. The "list" argument "that they do not speak english" is full of hot air, because they ran the lists even with spanish speaking stations. It was especially pathetic in the beginning, when a list would be taken one day, and ran next day, with lot of missing station, etc. Typical QSO rate with this type of operating was about 1 QSO every 2-3 minutes. But everybody got to know Carlos (never heard his call), the allmighty list taker. They were doing much better on CW on their own. It somehow comes back to that "useless" CW!
The last "legal" operation from San Felix was in April 1972 by W9IGW and K9KNW.

D68WB, Comoros
Bill is having twice-weekly schedule with ZS6 on Monday and Friday around 1600Z at 14.200. He will make contacts with deserving after he completed his schedule.

ET3PS, Ethiopia
was worked on 14.212 at 1630Z, 14.223 from 0400Z in JY3ZH net. QSL via DJ9ZB.

FH4AA, Mayotte
is new prefix, F6ECS should be active for a year or more with this new call. Look for him around 14.010 and 14.185 from 1130Z. QSL to J.Respaut, Box 4, Mamoutzou, Mayotte 97600, France. FR0FLO will be active soon as FH4AB.

FR - Reunion Isl.
No more FRØ calls will be issued in the future. Visitors will use FR/home call.

FT8XA, Kerguelen Isl.
New operator Rafik (F6EUX) should be active beginning late November. Equipment will include FT101E and FL2100, mainly on CW. QSL via F6FYD.

J5WAD, Guinea Bissau
Vlad, UB5WAD is active daily on 14.157 from 1900Z, he will be there for 15 months, and is expecting new transceiver in the near future. At present he can only run 25W and operate on 14.157, QSL via UA4PW.

JW - Swalbard
YL DXpedition by OH8MA and OH1YL to commemorate 50 years of YL amateurs in Finnland.
Other stations that are active include JW6BAA on 20m SSB, JW5VAA 14.175 after 1900Z, JW6VDA 14.227 1500Z, JW6WDA 14.189 1545Z.

KH9, Wake Isl.
Tom, AH3AA/KH9 reports that he and Dave AH9AB, are still on the island but rather inactive. This is because they have no power to the main shack at present and are operating from their living quarters with wire antennas. They hope matters will be put right very soon and they will make an effort to work DX during the Autumn DX season. Dave may leave the island in the near future. Tom expects to be in U.K. in July 1985.

R1O, Franz Joseph Land
was special prefix, if you have worked him, QSL via UB5KW.

S21 - Bangladesh
during the early part of August, there was a JH8YDY/S21 active from Dacca on 15 and 20 m. Apparently this operation was not authorized. The Bangladesh Amateur Radio League is now member of the IARU, so perhaps there will be some activity from there soon.

STØ - Sudan
TL8GE/STØ announced at the Clipperton DX Convention that his job would take him back to STØ for one week each month during autumn/winter.

SU1ER, Egypt
Is active daily 14.275-14.280 between 1600-2000Z for next few months.

TR8DM, Gabon
F3CY is active daily on 14.005 from 2000Z and 14.110 from 2030Z. Also 28 MHz from 0700Z. QSL to BP 268, Moanda, Gabon.
TR8JYC was heard on 21.010 at 2030Z. Jean TR8JLD is usually around 14.007 at 0300Z. QSL to BOx 2127, Libreville.

VK9MR, Mellish Reef
expedition by Down Under Contest Club for CQ WW Phone Contest in Multi OP - Single Transmitter category. Look for them on all bands 10-160 m. QSL cards via VK2WU, Box 31, Winmalee, NSW, 2777, Australia.

VKØGC, Macquarie Isl.
Graham will be back on Macquarie from October 1st for a new tour of duty.

V4A - St.Kitts
Is the new prefix that replaces VP2K effective 19.Sept. 1984, the first anniversary of their independence from Great Britain.

V44KF active near 7.085 at 0000Z. V44KG was heard at 3.785 around 0100Z. QSL to Box 20, St.Kitts.

VP2MW, Montserrat
Members of Rutheford Appleton Laboratory ARC (G3RRS) will be active during the CQ WW Phone contest on all bands. QSL cards to G3RRS, c/o Jean Mills, R20, Rutheford Appleton Laboratory ARC, Chilton, Didcot, Oxon, UK.

VQ9SK, Chagos
can be found on 14.260 at 2010Z and VQ9DX on 14.235 at 1830Z.

VR6KY, Pitcairn Isl.
YL Kari Young has been regular check-in with INDEXA Net on 14.236 from 0500Z on Tuesdays, Thursdays and Sundays. Tom Christian, VR6TC has been reported on 14.155 0300Z.

XU1SS, Cambodia
still runs a sked with VS6CT on Sundays at 1200Z on 14.245.

XX9DX, Macao
with VS6DX and KØCS group to operate CQ WW Phone as Multi Single and one low band station.

YK - Syria
VE1CHG/4U is still operating from the Golan Heights on 14.170 at 1715. QSL to J.H.Jackson, Box 335-Sitel, Camp Debert, NS, Canada B0M 1G0

YVØAA, Aves Isl.
The Radio Club Venezolano has said that only cards signed by YV5HUJ, Edwin Rivera, will be considered as official confirmation for the Aves Isl. expedition last March. The only official route for cards is RCV, Box 2285, Caracas 1010A, Venezuela.

4K1GAG, South Shetland
is quite active on low bands, 1640 at 0200Z, 7045 from 0500, USSR Antarctic Expedition.

4S7VK, Sri Lanka
is active daily on 14.210 from 1800Z, QSL to DJ9ZB.

5R8AL, Malagasy
Alain has returned from holidays and could be found on 21.330 with his QSL manager WA4VDE at 1700Z.

5X5GK, Uganda
is Dr. Gerry Kambites, VE7FXX operating there with vérbal permission. He can be heard most days on 21.335 at 1900Z in KA1DE's net. QSL via JA1BK.

9Q5RN, Zaire
Roger, is often found near 14.230 at 0145Z and on 21.200 at 1515Z working Eu.
9Q5MA has been reported 14.175 at 1900Z. 9Q5JE active mostly Mondays from 1500Z on 21.345. QSL via DL0HT

9U5JB, Burundi
Bull is back and active, keeping skeds with ON5NT every Sunday 21.410 at 0830Z.

9X5BJ, Rwanda
Jan is newly licensed with an FT-1 and Windom antenna and is active around 14.218 at 1830Z. He hopes to construct the beam if he can get the necessary materials. QSL to Box 626, Kigali, Rwanda.

KERMADEC EXPEDITION 1984

J. RUNCIMAN, ZL1BQD/ZL8BQD

It is Tuesday 13 March 1984 at 11:30 a.m. and we are finally on our way aboard the "Shiner" to one of life's great adventures. The years of hard work by Ron ZL1AMO and the months of departmental negotiations by Dr John Craig has finally paid off and we are on our way to the Kermadec Group of Islands, destination Raoul Island, ETA in five days time.

We have ten persons on board, five in the scientific party, four in the amateur party, and our Captain, John Taylor. From the Biology Department University of Auckland, John Craig is the leader of the expedition and also of the scientific party. He intends to study both the Kiore --- a native rat --- and the introduced Norwegian rat population of the island. Anne Stewart intends to study the local Tui bird population and compare their song and other characteristics with that of the native New Zealand Tui. Mark Vette is a great climber of trees and his talents will be greatly appreciated by the antenna raising hams, but his main job is to assist Anne and John in their studies. He is also a very capable researcher of animal behaviour patterns. Dr David Schell is an experienced Marine Biologist and a talented diver. His expertise will be greatly needed as it turns out, when disaster strikes our boat. Completing the scientific party is Mike Kingsford. He is an experienced Marine Biologist also, with a particular interest in the fish life and migration patterns from the northern Pacific down to New Zealand. Raoul Island is a very interesting "half-way house" for this type of study.

The amateur party on board comprises first of all the well known CW man from the South Pacific, Ron Wright ZL1AMO --- also known as ZL1AMO/C, VR6HI, ZK2EA, ZK9RW, ZK1MB, A35EA, 5W1CW, H44RW, VK4ANS/LH, YJ8RW, 3D2RW, ZK1CQ, and now ZL8AMO. Ron will work 10,000 QSO's on the trip. John Litten is ZL1AAS when he is at home and has been ZL1AAS/C and G3TGM, and now as ZL8AAS he is to work 5,000 QSO's. I am Roly Runciman ZL1BQD and I will make about

"Shiner" anchored at Half Moon Bay.

Entire group including the skipper - at this point no yacht! L.to R. - ZL8BQD, W6REC, ZL8AAS, three "natives", ZL8AMO, skipper, XYL of ZL8AAS.

10,000 QSO's on phone and CW on all bands. My other calls are FKORR, VK9NR, 3D2RJ, ZM1BQD, VR6RR, and now ZL8BQD. Duane Asherman W6REC has joined us from Stateside and enjoys the calls ZLØAJW, ZLØAJW/8, VK9LL, VK3DPA, and 3D2FR. Duane is on his first DXpedition and will break himself in on both phone and CW with a total of 5,000 QSO's.

And so the routine of 3 hours on watch and 6 hours off continues for five days. It is quite amazing to see very small "welcome swallows" along with other bird life two to three hundred miles out to sea. "Where do they go at night", I ask the scientific experts. "Oh back home again!" comes the answer, "they can fly enormous distances you know, and they will be back here again tomorrow!" Time is no longer measured by days of the week but simply by daylight and dark. Every three hours the shift comes on and the group coming off gets a quick bite to eat and tumbles into bed. Every hour the travelling log is read and entered into the ship's log. Each day we call up Auckland Radio and home to give position reports and get the weather. And so it goes on. Several small things stick in the mind, especially as some of us are rookies who have not sailed any distance before. For example the fascination of watching dolphin ride our bow-wave, or the spectacle of seeing the seas burst into phosphorescent green light in the small hours of the morning. Duane is absolutely certain that we are being approached by a ship late one night. "I can see the port side lights," he says,"funny though that the ship seems to be rising from the sea; it must be a BIG ship." Much to Duane's embarrassment and to our fun he almost logs the planet Venus as a sighting for that shift!! And what about the moths and butterflies three hundred miles from land! Where do they come from?

After four days of nothing but ocean we sight the first island in the Kermadec Group, Esperance Rock. At last we believe that we are really there!

Later that day we pass between Curtis Island --- which is still an active volcano with quite a bit of steam escaping from the crater --- and Cheeseman Island, which is inactive and covered with quite bushy vegetation. At approximately 8:30 p.m. in heavy rain and mist we glimpse Cauley Island 2 to 3 kms to portside. We know we are real close to our destination now and hope to see Raoul Island in just a few hours. At last radio contact is made with Warrick ZL8AFH via marine VHF channel 16 and we are told to lay-off as close as we like to the "landing platform". We had been told by previous visitors to the Island about the method of getting on to the island but experiencing it at first hand is quite another matter indeed!

Everything has to lifted onto the Island. Goods and chattels have the luxury of being landed via a cargo net or basket, while mere humans have to clutch onto a ladder and hope that Warrick knows what he is doing up there in the winch house. Judging the swell versus the relative position of the ladder is quite a feat. The landing boat "CHUNDER" --- a South Pacific term for reviewing one's recently ingested food --- is aptly named. It along with everything else makes the journey up the the cliff face on the flying-fox, hauled by yet another winch. At the top, proof conclusive that we are indeed on Raoul Island with the instructions to "prevent damage to the vegetation and the natural features". Then it is on to our living quarters for the next 8 days. Ron and John decide to "share" the operating shack, while Duane and myself together with some of the scientific party share the main sleeping and dining facilities.

Wool shed on Raoul Island. Small shed on left used by Z18AAS and ZL8BQD.

The personnel on the island surely rate more than a passing mention. They are a terrific band of guys who really treat us well during our stay. Mike (Officer in Charge) takes care of our passports etc and settles us in. Paul (Lands and Survey Department) goes out of his way to show us the delights of Raoul and gives us enormous assistance during our boat tragedy later. Garth (attached to the M.O.T.) was the Raoul Island champion table tennis player until falling to the pile-up sharpened bat of ZL8BQD. Keeping up with Garth's exploits in other fields is almost impossible and his photographic expertise in particular is quite remarkable. Tom is the resident mechanic for 1983/84 and an expert cook into the bargain. Warrick is the technician and the radio operator on

Raoul Island - looking West from the "Wool shed".

the Island. Most will know him as ZL8AFH. He is now the proud owner of a tri-band beam and an odd assortment of wire, coax etc. so his signals on the higher frequencies should be a bit better now.

Raoul Island itself is quite a South Pacific paradise . It is still an active volcano with upwards of six earthquakes per day. Most of these are below the level that you would normally notice but one or two heavier jolts reminded us of the continual activity. Most of the Island is covered in Nikau palm as a type of undergrowth, with a canopy of the beautiful red-flowered pohutukawa. Along the northern coastline is a self-sufficient farm which supports the permanent residents of the Island. The coastline is extremely rugged with only a narrow rocky beach along the western coast, where the original Bell family used to live many years ago. There are still a few goats and wild cats on the Island and of course lots of rats! Bird life is quite prolific and the son of the Tui makes the bush come alive. The orange grove provides fruit of a sweetness that must be experienced to be believed and sweet bananas grow freely as well.

The highlight for the amateurs was of course the radio. We managed to get a 160/80 meter flat top dipole at about 80 feet supported above the cliffs between two very large Norfolk Pine trees. A second 80/40 meter dipole was supported between a further pair of trees. Two tri-band beams rounded out the antenna farm. All of us brought along our own radio equipment which consisted of an ICOM IC-745, an ICOM IC-740, ICOM auto tuners, Kenwood TS830, and Kenwood TS430. We were fortunate with propagation giving us upwards of 8 hours per day on 10 meters. It was a pleasure to be able to work such exotic DX on 10 as: 5T5, 5N1, 6V1, HKØ, 9L1, CN8, ZS3, 7Q7 etc!! Again we tried to cater for other interests such as QRP operation. For those Stateside stations that stood by to allow us to do this, our grateful thanks. To those who didn't then next time give it a go and join in the fun. The best QRP was N6HJ with 100 milliwatts believe it or not! Many Stateside stations gave us the report, "I don't know how QRP I am but nothing is moving here!" Great stuff fellows and I hope that we can do it again from other Pacific DX locations. We made a total of 30,000 QSO's to all points of the globe. BY1PK called us --- which sure makes a nice change. We covered all bands 160 to 10 meters, with most QSO's to U.S.A. and to Japan but special mention must be made of DK9KE and his net on 21.157 Mhz.

Looking East from the ZL8 location.

Thanks Werner for getting so many of the Europeans through to make that valuable ZL8 contact.

Life was quite exotic until 21 March; three days into the operation. Cyclone Cyril made its way down from Tonga and struck the Island in the small hours of the morning, bringing driving rain and very high seas during the time of total darkness. At 12:15 a.m. the anchor ropes holding our yacht "Shiner" gave way and allowed the boat to hole itself against the rocks in Boat Cove. Captain John Taylor and two of the scientists had to abandon ship into their Avon landing craft and amidst the rioting elements make their way to shore. The only possible landing was over very large and dangerous rocks with nothing but the dim light of two torches held by members of the shore party to guide them. They were fortunate to catch the right wave and make a scrambled but safe landing. We were very lucky indeed that no lives were lost. The boat however was a total loss together with quite a bit of personal gear and clothing. Our hosts on the Island together with the Oceanographers from the Scientific party did a terrific job in salvaging what was possible from the boat over the next two days. It was of course a bit of a damper to the expedition but when we knew that no lives were lost we could at least carry on with the radio work with easier minds.

The problem that had to be faced of course was just exactly how we were going to make our way home again. After several different possibilities had been considered we finally accepted the offer of a diversion pick-up by the coastal freighter MV Vili from Tonga. The cost at US $3000 was an added and rather unwelcome expense but there was no other realistic alternative. However, other than a little seasickness on the part of some of us, we enjoyed a very nice and comfortable trip home with the very friendly crew of Tongans on board the Vili. There was great excitement by all the party when we sighted New Zealand again though! The lights of Auckland City and the prospect of meeting our families again was a real thrill and hard to describe. Thus ended the trip of a lifetime to the rare and exotic Kermadec Island.

And now to the cards...Thanks to all for the nice comments re operation procedures, patience, and a job well done etc. Special thanks go the NCDXF, INDEXA, Chiltern Radio Club and to CANADX. Thanks also to the many individual Amateurs whose assistance made this expedition possible. We believe that some contributions have also been made via HIDXA but as yet none of these have been handed to the expedition. Acknowledgement is also due to the N.Z Lands and Survey Department, N.Z.M.O.T., the University of Auckland, and the Scientific Group. Finally our very sincere thanks to our hosts on Raoul Island for their tremendous help with phone calls, meals, and hospitality when times were so tense. (ZL1BQD)

RON WRIGHT, ZL1AMO TOURS US AND CANADA

One of the Kermadec expeditioners, Ron, ZL1AMO was touring the North America and showing us slides accompanied by his super presentation and comments.

About 50 of local DX and contest types gathered to hear Ron in Burlington, ON. Canad-x sponsored the meeting. Ron talked about his other expeditions and experiences. It was indeed pleasure to hear Ron's talk and shake hand with him, thanking him for many "new" ones and all the precious contest points and multipliers. Ron is excellent CW operator and winner of many contests. (VE3BMV)

ELECTRONIC PIZZAZZ

DON NEWLANDS, VE3HGN

Sometimes the professionally orchestrated public relations event (stunt) barely matches for originality and overall effectiveness an event created by amateur rife with enthusiasm. Saturday night (July 14th) was such an event. When the Olympic torch was being carried over the Rocky Mountains and down into northern California, radio amateurs provided on the spot communications for the long run south to Los Angeles. Jim, KB7RV and Bob, NA6E immediately recognized the significance and potential of this event. The Olympic torch which had left Greece weeks before, had finally arrived on the last leg of its journey and would soon be borne to host city of Los Angeles for the 23rd Olympiad.

In a spontaneous gesture of good will and fellowship these two amateurs made one phone call to Greece and within moments radio amateurs in and around Athens, some with hand held two meter radios, others with QRP 70 centimeter base stations, others working through Athen's 2 meter repeaters, were shouting their greetings and good wishes into California via Oscar 10, which was hurtling through space some 20 thousand kilometers above the Atlantic. Amateurs in California and Nevada responded with greetings and first hand description of the torch bearer as he ran through the night past the cheering crowds who lined the route. Bob, an unflappable building inspector, retransmitted Oscar's clear signal into numerous California repeaters enabling hundreds of hams to participate in an historic event. The resonant voice of George, SV1AB (AMSAT coordinator in Greece) expressed it all when he said: "We in Greece wish you all great success with this historic athletic event. Good night and best wishes from the birth place of the Olympics."

From a spectators point of view, these exchanges filled one with a sense of pride in the hobby and renewed faith in the fellowship of Amateurs.

Congratulations to Bob and Jim and the California Telephone Pioneer Club members who accompanied the torch bearers. (VE3HGN)

INTRODUCING . . .

KH6BZF, LEE WICAL

or better known as KH6 Blooming Zipper Flipper, contributor to our propagation column, is one of those operators who has been in contesting for a while, so familiar to many looking for that KH6 multiplier. Supporter and promoter of contesting, Lee is donor of CQ WW Contest Trophy for 21 MHz World High score on phone.

Lee's shack is most interesting, using good old Collins radios: 75S3c, 51J3, KWM2, 32S3, 30L1, Hnery 2K. Antennas are Mosley TA36, Inverted Vees, vertical, 18AVQ, 2m and satellite antennas.

Professionally, Lee has had almost thirty years experience in communications planning, designs, operations, transmissions and systems management. His technical background encompasses radio transmissions, systems interface work, and analog-digital radio systems. He is presently a section chief at DCA-Pacific. Catch him on the air and he will be happy to compare computer notes, too.

KH6BZF writes and distributes KH6BZF Reports to a number of DX Bulletins. We are delighted to have Lee as a contributor to our magazine.

K4TWJ, DAVE INGRAM

Dave is our technical contributor and one of best known amateurs in the field. Licensed for over 25 years, he holds 1st. Class Phone Commercial License, radar endorsed and Amateur Extra Class License. Dave is a broadcast engineer, electronics instructor, lecturer on a national basis, inventor and electronics designer. He has published over 300 articles to date with many magazines including CQ, QST, 73, Ham Radio, Worldradio, A5, CQ Elletronica (Italy), Amaterske Radio (Czechoslovakia), etc.

Dave has written a number of books: Complete Handbook of SSTV, OSCAR The Ham Radio Sattellites, 10 FM For The Radio Amateur, Secrets of Ham Radio DXing, 44 Special Ham Radio Circuits, Video Electronics Technology, RTTY Today. Co-author of Editor and Engineers Radio Handbook. K4TWJ monthly columns appeared in 73, Worldradio, A5 and presently in CQ magazine.

Deep interests in amateur radio include activity in DXing, OSCAR, EME, QRP, MSTV, FSTV, computers, 2m FM and SSB, gear design, RTTY, microwaves, shortwave and clandestine monitoring (hoodlums better watch out!) and he was one of the first SSTVers and known as a leader in video communications and active in video societies on four continents.

Among other activities, Dave was technical advisor ARRL, sponsor and creator of International SSTV Society and WW SSTV Contest. He also assisted University of Surrey in England on design of SSTV capabilities for UOSAT now in orbit.

Assistance to the third world countries includes initiation and directing efforts which resulted in first time TV for Pitcairn Island, Norfolk Island, Pakistan and India.

It is especially refreshing to see Dave as an active amateur rather than "isolated author".

K4TWJ's shack has three operating positions. First one (Fig. 1) includes latest gems: IC751, TS-930S, L4B amplifier, SSTV, RTTY and first Ham SSB Transceiver - Collins KWM1.

The second position (Fig. 2) includes Icom 730, KW amplifier, Ten Tec and Icom OSCAR 10 rigs, Mirage amplifier, 30m QRP rig.

The third "antique" table has SW3 receiver, TNT/10 transmitter, S-38 receiver and other good oldies.

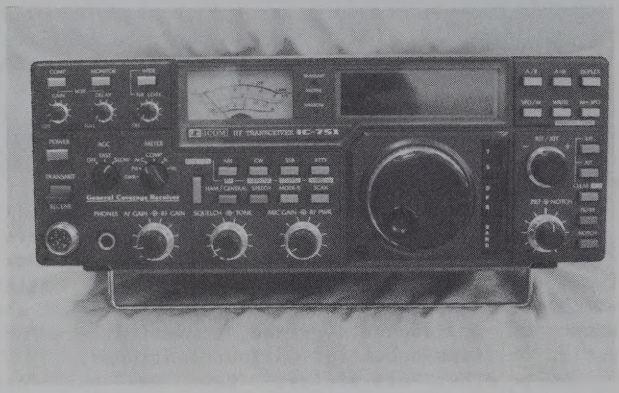
Dave can be found around 14.180 or IRSA net on 14.199 most Sundays, during the week-nights on 30m, OSCAR 10, 20 SSB.

It is a great pleasure to have Dave aboard!

A CLOSER LOOK AT ICOM'S IC751 HF TRANSCEIVER

A SUPERB RIG!

Dave Ingram, K4TWJ



There is an absolutely fascinating array of super function transceivers available to today's radio amateur, however we seriously doubt anyone finding a unit superior to Icom's new 751 HF "dream rig". Some of you may feel similarly about your present rig, so I'll explain my viewpoint. Through the years, I've used almost every amateur transceiver....from the original Collins KWM-1 to recent Kenwood TS 130,830,930, Yaesu FT 901,980,102, Collins KWM-380, Icom 730,740,745, Ten Tecs, Drakes,etc.,etc. I've directly compared all rigs, and I have no reason for "playing favorites". I merely "tell it like it is". Personally, I sort of visualize Icom as the "Chrysler of amateur radio": they introduce innovations which others follow (such as dual VFOs, microprocessor control, etc.). Unlike "older" Chrysler, however, Icom's innovations are fully perfected before introduction to the population at large (after Chrysler debugged electronic ignitions and microprocessor-controlled carburetors, other manufacturers followed suit). That's enough amateur philosophy, so let's take a look at this new amateur transeiver!

The Icom 751 is an exceptionlly compact "deluxe" transceiver measuring 115 mm high by 306 mm wide by 349 mm deep. That translates to roughly 5 by 12 by 12.5 inches (including rear heat sink/blower area) on my station's yardstick. The unit weighs roughly 28 pounds including its option built-in AC supply; slightly less without it. That supply, incidentally, performs equal to an external supply (such as Icom's PS 15), and it's cooled slightly by the 751's internal fan. An internal speaker is mounted on the unit's right side, and audio quality seems slightly better than popular top or bottom mounted speakers. An internal wattmeter/SWR bridge is also featured providing a "single box" setup equally suited for fixed, portable or mobile operations as desired. In fact, it's quite possible to unplug the unit from an "in shack" position, move it into the auto, and continue an in-progress QSO.

The transceiver is fully solid state and broadbanded in design, providing instant-on and no-tune-up operation: an experience which leaves tube rigs reflecting shades of the "horse and buggy" era. Frequency coverge is 100 kHz to 30 kHz continuous on receive, and 160 through 10 meters including 30, 17 and 12 meters (WARC) on transmit. All amateur frequencies are enabled and ready for action as supplied. A front panel pushbutton toggles the rig between amateur band operations and general coverage reception. The 751 includes three very effective features of importance to serious amateurs: a high performance noise blanker, an efficient RF-type speech processor and full CW break-in, (if desired). The RF amplifier section runs surprisingly cool, yet delivers 110 watts RF output without strain. Receiver sensitivity and noise floor are exceptional, and a switchable RF amplifier or attenuator is provided in the top mounted controls. The unit is smoke grey color, with just enough metal buttons and knob skirts to add a look of sophistication. Looking inside reveals a well planned layout with swinging layer of boards. The rig seems like it would be relatively easy to work on should the need arise.

GENERAL FEATURES

Considering the deluxe nature of Icom's 751 HF transceiver, it's somewhat difficult to say where "features" end and "bells and whistles" begin. Indeed, I could write a small book on the rig and still overlook several aspects. Take a look at the rig's front panel, and we'll begin the "tour". There's VOX, naturally, plus an IF section monitor which can be used for setting mike levels, checking transmitted audio quality, etc. Turning the "delay" control to "full" gives full CW break-in operation. An internal reed relay handles keying, while front panel transmit/receive LEDs flicker with code. The continuously variable noise blanker takes out the worst ignition noises, or it's wide switch can eliminate power line or "woodpecker" garbage to a surprising degree (Icom tranditionally makes great noise blankers).

The front panel's middle array of buttons select AM, CW, SSB, RTTY (AFSK generator built-in and ready to use!), ham or general coverage, speech synthesizer announcement of present operating frequency (an available option) and programmable scan (from memory 1 frequency to memory 2 frequency) or open (full band) scanning. The "function" button allows selection of narrow CW and RTTY filters (option) "opposite" sideband and FM (the 751 is ready as supplied for worldwide repeater fun on 10 FM. (If you haven't caught the action of 10 FM yet, check my TAB book #1189). The rig's squelch operates on both FM and SSB.... and that feature has to be experienced to be appreciated. The other morning I almost forgot the rig was on while dressing for work. Suddenly a P29 came "barreling through" on 14,160 kHz calling CQ. The 751's tone control is different from many rigs in one respect: it really works. Finally I can hear stations without "boom box" grumbles! The RF output control varies power on SSB and CW.... nice for reducing power without losing audio fullness. The passband tuning and IF notch are great for dodging

QRM, plus the notch can be used with the noise blanker for receiving weak signals (S6) through horrendous line noise (10db over S9). The RIT and XIT controls are almost equal to third VFO. More on that later. A number of the rig's features are not noticed at first (or second glance). The VFO knob, for example, turns a light-chopping wheel which sends pulses to a digital counter for frequency control. The tuning rate (10 Hz or 100 Hz increments) is automatically selected according to how fast you turn the knob. The rig is fully microprocessor controlled, and it can also be computer interfaced. There are also dual VFO's, 32 memories with lithium battery backup, an included HM 12 scanning mike and the unit's transmitter is rated for full 100 percent duty cycle operation. You would suspect that after a couple hours operation this thing would get hot, but it continuously stays cool as a cucumber.

BELLS AND WHISTLES GALORE!

Here's the area where the '751 really shines. There's enough artillery in this unit to equal a full communications center! First off, the rig's 32 memories store both band and mode information. A memory can be "called up" by tapping the VFO/M button (example: 28.600 mHz). The tuning dial then tunes like a VFO (example: 28.600 to 28.500). Alternately, tapping VFO/M plus side switch "DFS" permits direct tuning knob "stepping" through all memories. Amateur band selection (when in Ham mode) are also selected by pushing the "Band" button and turning the main tuning knob. Finally, side switch "TS" enables the 1kHz tuning rate for fast QSYs. If you can visualize all these capabilities right from the main tuning knob, you'll understand why I say the rig is as nimble as a sports car.

The 751's twin VFOs can be separated and/or used in a variety of ways. A, for example, can be set for CW operation on 10.102 mHz while B is used for SSB on say, 14.170 mHz. Toggling between A and B allows one to carry on two QSOs simultaneously.... and on different bands. The RIT can be used as a clarifier, or its XIT can also be enabled to synthesize a third VFO (with 10 kHz range). I've carried on three simultaneous QSOs in that manner: two on CW (use full break-in) and one on SSB.

Scanning buffs should note the 751 will scan automatically from front panel buttons or manually from mike buttons. Scanning limits can be programmed (memory 1 to 2) or "full band". Likewise scanning may be "open" or by mode (30, 20, 10 cw, 49, 31 meters AM, 40, 15, SSB, etc.).

Technically speaking, the 751's "frills" include a receiver "front end" with J-FET Double Balance Mixing to provide 105dB dynamic range. A switchable Low Noise Amplifier reflects shades of LNAs used in TVRO systems: quiet but effective. Frequency sensitive circuits within the rig such as RF amplifiers, local oscillators, etc. use resonant circuits "inserted" by relays. A 1-in-16 encoder monitors selected main knob frequencies, and sends appropriate counts to associated boards. There, 1-in-16 decoders interpret counts and enable related relay drivers....which key relays to "pull up" tank circuits. Transmit "lockout" on unauthorized frequencies merely involves sending a binary "1" to transmit circuits.

Some of the 751's "hidden frills" are it's ability to "jump around" from memory to VFO or vice versa. In other words, one can check all 32 memories during brief pauses while receiving or new frequencies can be added with a button push or VFOs can be loaded from memory or....well, let's not go too far on such DXing secrets (another subject covered in my TAB Book #1159).

Operating the 751.

The single most exciting aspect of the 751 is definitely using it! Whether one has 10 minutes or 10 hours for amateur radio enjoyment the 751 is ready for action. Switch it on, select a band and start tuning/callling. Although receiver sensitivity is superb, I'm amazed at its immunity to crossmodulation from adjacent strong signals. That J-FET DBM "front end" works! The IF notch and passband tuning are more than adequate for avoiding QRM, and the tone control often "softens" band noises. Of course, the rig's true color appear when one really gets it "spinning".

Freewheeling the 751 into action begins with paogramming it according to ones interest and desires. If you're a single band "ragchewer" or a late night casual DXer, you probably will not need 32 memories. If you're a gung-ho enthusiast like myself, however, 32 memories are a blast! Some of the frequencies I store are "hangouts" on 30, 20 and 10 meters SSB and CW, plus the beacon network on 14.100, AMSAT Net on 14.280, SSTV on 14.230, 10FM on 29.600, and weeekly skeds on 28.540. Other memories store underworld activities on 13.560, CIA/FBI on 7.525, Latin American guerrillas on 6.610 and 6.950, coastal activities on 6.520 plus "numbers" stations, smugglers, coast guard and our favorite broadcast station, WRNO worldwide. The remaining memories are left open for storing frequencies during amateur activities (such as the previously described 2 or 3 simultaneous QSOs.

During a typical on-the-air stint, I load one band or mode into VFO A and another in VFO B. During QSOs, I tune for DX and load them into memory for successive QSOs. Soon I'm recalling from memory and reloading VFO's accordingly. A quick tap of the "DFS" and VFO/M buttons then zips tuning through underworld and mercenary activities, drug runners and chasers, 10FM, shortwave broadcasts, beacons, QSOs, WWV....you name it....and all with a turn of the main tuning knob!

SUMMARY

All spects considered, the Icom 751 is one tremendous amateur HF rig. It's definitely in the "high tech" class but it doesn't exhibit "high tech" idiosyncracies of large size, massive weight and exorbitant AC power requirements. The 751 runs cool, whereas similar rigs run hot. It's nimble and frequency agile, and it's backed by an impressive service section/policy at Icom America. Evelyn Garrison of Icom must have played a hand in that program, and it's a point to consider. If an Icom gives trouble, repairs are quick and efficient. I wish I could say the same for all importers/manufacturers.

I've never liked the muffled audio response of any Japanese mike, so I never use them "as is". I replace their element with a Shure 526 or Heil HC-3 cartridge. On-the-air reports always say the rig sounds great. Evidentlly Japanese mikes are made for Japanese voices. I seldom hear a bassy Japanese.

The 751 is supported with a full line of options, including extra SSB, CW and AM filters. An AC supply is also optional: PS 15 external, PS 35 internal, PS 30 heavy duty. Other options include full station units such as automatic antenna tuner and IC-2-KL kilowatt input/500 watt output solid state amplifier. The latter unit completes an "ideal setup": instant-on-direct QSYs right from the transceiver, no tuneup and a potent 500 watt signal. Beautiful!

SPECIFICATION: IC-751

Frequency coverage: Ham Bands in MHz: 1.8 - 2.0; 3.45 - 4.1; 6.95 - 7.5; 9.95 - 10.5; 13.95 - 14.5; 17.95 - 18.5; 20.95 - 21.5; 24.45 - 25.1; 27.95 - 30.0. General coverage receive: 0.1 to 30.0 MHz in thirty 1 MHz segments.

Frequency control: CPU based 10 Hz step digital PLL synthesizer, independent TX RX frequency available. 6 digit 100 Hz step digital readout, with RIT offset display.

Power supply: DC 13.8V at 20 A max. or internal or external AC power supplies are available.

Antenna impedance: 50 Ohm unbalanced.

TRANSMITTER

RF Power: SSB - 200 W PEP intput, CW/RTTY - 200W input, AM 40 W output. Output power is continuously adjustable.

Emission mode: SSB (USB or LSB), CW, RTTY (FSK), AM, (FM option?).

Harmonic output: More than 40 dB below peak power output.

Spurious output: More than 60 dB below peak power output.

Carrier suppresion: More than 40 dB below PPO.

Unwanted sideband: More than 55 dB down at 1000Hz AF input.

Microphone impedance 600 Ohm.

RECEIVER

Receiving mode: CW, SSB (USB,LSB), F1 (FSK audio signal), AM.

IF frequencies: 1st - 70.4515 MHz; 2nd - 9.0115 MHz; 3rd - 455 kHz; 4th - 350 kHz with continuous bandwith control.

Sensitivity: Less than 0.25 uV for 10 dB S+N/N

Selectivity: SSB, CW, RTTY +-2.3 kHz at -6 dB (Adjustable to +-0.4kHz min); 4.0 kHz at -60 dB

Spurious response rejection ratio: More than 60 dB.

Audio output 3 Watts, impedance 4 - 16 Ohms.

RIT variable range: +-9.9 kHz. +(K4TWJ)

Some contester's observations: I had a chance to compare Icom 740 and Kenwood TS-930S, both in the contest fire. Can not comment on the performance of 751, but things in which 740 has outdone 930 was a quieter receiver (less internal noise), you can read weak SSB signals better, clear crisp audio, better noise blanker (you do not hear "holes" in the signal when blanking). TS930 "feels" better especially for CW operator, more convenient to operate for contester, crush proof front end - (appears to be the best around). Display shows 10 Hz increments. When outfitted with Fox-Tango filters, the selectivity is better on both radios. More on that later. Sure want to try 751! (VE3BMV)

PROPAGATION

Radio-Wave propagation is one area that is mysterious to many of us. We also say: "you can't do anything about it". True. But we can use it to our advantage if we understand it better. For the contester and DXer it is very important to be "on top of things" because, lets face it, propagation allows our tiny signals to get from point A to point B. We should be at least "propagation literate", understand it and then use it to our advantage and get those big scores or that rare DX bird.

One area that I think is ignored to a certain extend is fitting the antennas and antenna design to the propagation modes and mechanisms. Quite often we see antenna designers trying to lower the radiation angle for particular antenna design, when this is not realy desirable, because propagation at those low angles is only about 10 % of the time.

It is important to consider both areas: propagation and antenna engineering, to achieve optimum results. This is especially important for the contester, where he can not wait another half hour or so for the band conditions to get better. He has to make that contact and go on with contesting.

I started my search for the "ultimate" antenna, trying to design an antenna that would deliver the maximum gain per boom length. The result was "VE3BMV RAZOR Beam" - the combination of Quad and Yagi elements. This design gave me what the telescope gave Galileo. A powerful tool to explore and observe some of the things that are happening "up there", in the sky, when we send signals from one end to another. Contests give excellent oportunities to compare the performance of the antennas, and assign point value to whatever we are doing.

Razor Beams helped me to boost my scores by about 30% and "nail" most of the Canadian monoband all time records. Also, they helped me to observe, study and discover things that do not agree with some of the theories we were led to believe since Marconi's days. My strong belief that our signals propagate more by "conduction" or refraction, rather than "reflection" is a result of observations made by using stacked Razor Beams and countless hours of on the air tests and observations. The first article on the subject was published in CQ Magazine, June 1980 issue.

In our propagation column we will try keep the fire going and do a number of things:

1. Present statistical data on important propagation indicators. This will allow us to inform you of some of the things we observe on the bands and relate them to those indicators. Using this information, we should be able to predict similar behaviour when those conditions occur again. We are setting up the the computer program and the results will be presented in graphic form, which should make it easy to read and to interpret.

2. Present a short term forecast based on a 27 (or 28?) day cycle.

3. Open-up the dialog and provide a forum for exchange of ideas, observations, unusual occurences of propagation openings and other items of interest.

4. Continue research on conductive theory of propagation and write articles on this subject.

We have a number of excellent people involved in this project. We are looking forward to a lively exchange of ideas and opinions (VE3BMV)

KH6BZF STATISTICAL DATA FOR PERIOD OF 1-30 SEPTEMBER 1984

1984	CONDX	FLUX LEVEL	SSN	GEOMAGNETIC FIELD	ALPHA	K	NOTES
09 01	HN-LN	092 VY LOW	035	UNSETTLED	10/15	3	
02	LN	092	035	ACTIVE-UNSETTLED	21/19	2	
03	LN	093	036	UNSETTLED-ACTIVE	13/18	2	STORM BEGAN 04/060
04	DIS	090	032	MINOR/MAJ. STORM	38/55	6	AURORA A=113 KL7
05	DIS	088	029	MINOR STORM-ACT	35/61	4	STORMY, AURORA
06	LN-HN	085	026	UNSETTLED-ACTIVE	19/15	3	
07	HN	084	025	UNSETTLED	09/11	3	
08	LN	082	022	QUIET-UNSETTLED	14/14	3	
09	HN	081	021	UNSETTLED-QUIET	09/09	2-5	STORM BEGAN 2100Z
10	LN-BN	078	017	UNSETTLED-MIN.STORM	17/18	3	
11	LN	077	016	UNSET.-ACT-M.S.	19/18	3	
12	LN	076	014	UNSET.	11/?	3	
13	LN	074	012	UNSTTLED	12/12	2	
14	LN	074	012	UNSET-SLGHTLY ACT.	13/13	2	
15	LN	073	010	UNSETTLED	10/10	3	
16	LN-HN	073	010	UNSETTLED	11/10	3	
17	HN-LN	074	012	UNSETTLED	10/08	2	FAIR HF PROP.
18	HN	073	010	QUIET-UNSETTLED	07/08	3	GOOD HF PROP.
19	BN-DIS	074	012	ACTIVE-M.S.	27/29	5	AURORA REPORTED
20	BN	074	012	ACTIVE-M.S.	20/17	3	
21	BN	075	013	ACTIVE-UNSETTLED	10/12	3	
22	BN-DIS	075	013	MIN. STORM LVLS	21/24	3	
23	HVY-DS	076	014	MIN. MAJ.STORM	70/83	6	AURORA
24	DIS-BN	076	014	MAJ.MIN.STORM	30/49	4	AURORA
25	BN-DIS	074	012	MIN.STORM-ACTIVE	23/34	3	AURORA
26	DIS-BN	074	012	ACTIVE-MIN.ST.	29/40	3	K=5 0500-1500Z
27	DIS-BN	073	010	ACTIVE-STORM LVLS	23/29	3	K=5 0600-1200Z
28	LN	073	009	ACTIVE-STORM LVLS	11/17	2	
29	LN	069	005	UNSETTLED	10/11	3	SOLAR FLUX MINIMUM
30	LN	072	009	UNSETTLED-ACTIVE	14/29	3	

The Solar Index Centre (SIDC) Observatoire Royal de Belgique, Brussels, Belgium reports the Mean Average 10.7 cm Radio Flux for August was 78.0 as compared to June 84 = 100.3, May'84 = 128.3, April 84 = 128.7, March'84 = 122.0, Feb'84 = 140.6 and January'84 116.1. Last November and December 1983 Solar Flux Mean Averages were Nov. = 92.5 and Dec. = 93.4. Last month's low to very low solar outputs resembled those of last winter (N. Hemisphere). A Class-C event/subflare occured from region (RGN)4565 on the Aug. 29, but this region was minimal for any further flare production. Some recent restructuring has taken place with RGN 4567 on 1st Sept. This RGN contains one of the largest, most complex magnetic gradients on the solar disk since the 25th June 1984. This RGN contains a Delta Configuration worth watching. (May it bring us good propagation for CQ WW.)

The geomagnetic disturbances noted between the 27-30th Aug. and 4 - 5th Sept. were suspectically caused by a disapearing filament and more details may follow upon receipt of same. Aurora and 6 m activity was reported.

The SIDC in Brussels, Belgium reports that Mean Provisional International Sunspot Number (Smoothed) for this year was as follows: Jan = 57.6, Feb = 84.5, Mar = 83.6, Apr = 68.6, May = 75.1, Jun = 46.2, Jul = 37.0, Aug = 24.8. (Sure looks like down hill slalom.)

The Solar Activity continues to be very low and this fall's contest season does not appear to have the zip in the bands that was experienced last Fall. SORRY! Better cross everything. Band CONDX for CQ WW 26-28 Oct. ACTIVE to periods MINOR STORMY.

For the period up to Nov. 20, 1984: The geomagnetic field has been at active levels, with some X-ray flare activity noted, to Minor/Major storm levels for most of the week 19-27 Sept. A Minor storm began at 22/0700Z and then developed into a Major storm at 23/1200Z with conditions disturbed. All the 6 m and Aurora reports are not in yet, however, Aurora was experienced on the 19th and 23-25 Sept. 1984. Brief storminess conditions may be expected at any time through 09-10th Oct. 1984, at least, when reoccuring large Coronal hole activity is expected to return to the Sun's disk. Any proton event/observations for this past week are missing from this report.

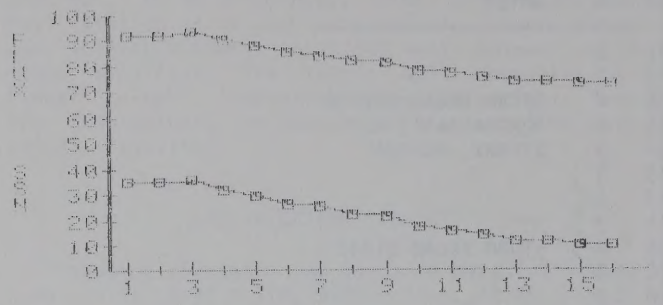
For the CQ WW Phone Contest 27-28 Oct. 84, the forecast conditions may be better than first expected, but they wsuld be certainly below normal than last year. 15 and 20 m are expected to be good to excellent if geomagnetic storm strikes. Low bands 40 - 160 m should start opening around 3 PM (40 m), improving around 9 PM and an hour before sunrise. (KH6BZF)

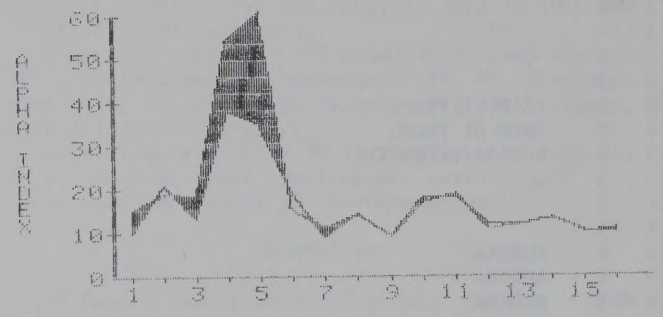
There might be still some hope for CQ WW Phone! Looking at the forecast from Energy, Mines and Resources Canada, Earth Sciences, Earth Physics Branch Division of Seismology and Geomagnetism (Boy, they sure could use one-letter call sign, Hi.) - it says that the following days the Geomagnetic Activity will be ACTIVE: Sept. 22-24, Oct. 6-7; QUIET: Sept. 17-18, 27-28, Oct. 3-4, UNSETTLED for the rest of the period. Take your pick. You never know. That's what makes it veeeery interesting!

The 72 hour forecast of geomagnetic activity is available by calling 1-613-992-1299 (24hrs./7 days a week). This forecast is updated every Tuesday and Friday (between 9:00 and 10:00 AM VE3 time).

(VE3BMV)

STATISTICAL DATA





SEPTEMBER 1984

K INDEX/CONDX...

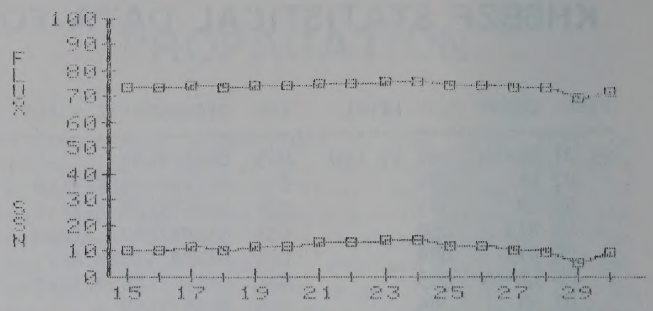
SEPTEMBER 1984

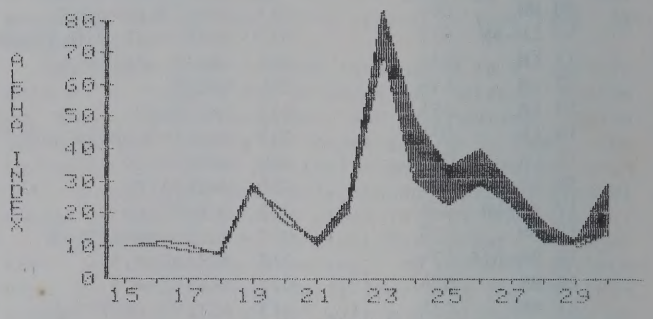
The statistical information is compiled by Lee Wical, KH6BZF. Graphs are processed on the computer by VE3BMV. This should give a good visual interpretation and if we stick with scales, one can make long diagrams out of it and very nicely follow the trend.

The first diagram shows the value of solar flux (top curve) and SSN - sunspot number (bottom curve). The X axis and scale is the same for both. The Y axis shows the individual dates. For clarity we will stick with 16 day periods.

The second diagram shows variations of alpha index for each day. The dark shaded area shows increase, while the white area shows decrease in the value of Alpha Index for each day.

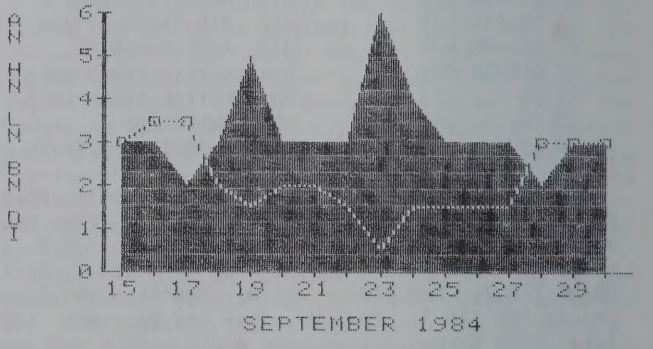
The third diagram shows the value of K Index (shaded area) on the scale from 0 to 6. The dotted line represents the propagation quality where the scale is: 5 - Above Normal, 4 - High Normal, 3 - Low Normal, 2 - Below Normal, 1 - Disturbed, 0 - Minor or Major Storm. In the future we will use numerical values 0 - 5 to express the quality of propagation. This allows the computer to process and relate the information to our QSA 5 scale. 5 = super, 0 = dead as a doornail.





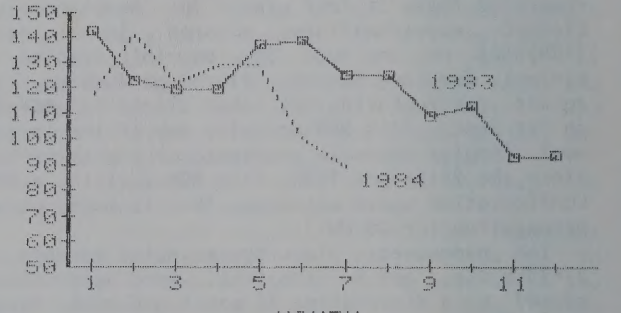
SEPTEMBER 1984

K INDEX/CONDX...



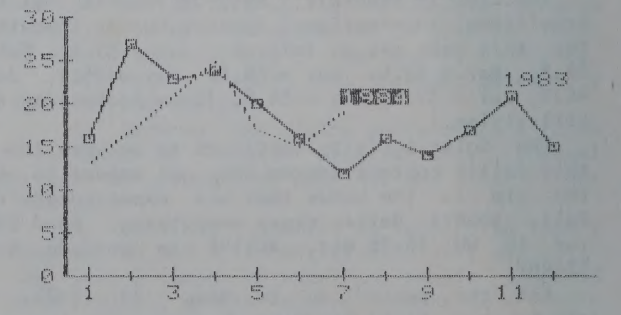
SEPTEMBER 1984

MONTHLY MEAN SOLAR FLUX



MONTH

GEOMAGNETIC INDEX



MONTH

NOTES ON CQ WW '84 PHONE

Sunspots are taking their toll on scores this year, especially on high bands. There was a noticed improvement on the lower bands, especially 80 and 40 m. Propagation was not as bad as the gloomy forecasts predicted. It could be actually considered quite good if not excellent, considering what we had a few weeks before the contest. Bands were actually getting better as the contest progressed which is probably quite a desirable situation. We want to work the "local" stuff first to get it out of the way and to get some contacts in the log. Second part of the contest is then spent chasing the "juicy" once and those precious multipliers.

Some contest score rumors especially from the Multi-Multi giants are excellent indicator on how it was. You can compare their scores with last year's, especially stations that are more-less stabilized, like N2AA, VP9AD and others.

Here are some scores with band by band breakdown as heard at the end when the smoke cleared up: (160 m band first, QSOs, zones, countries)

N2AA	80	15	25	VP9AD	764	15	31
	510	31	100		1671	21	67
M-M	514	34	102	M-M	2056	32	99
	1530	37	135		3040	34	122
	1069	29	137		3436	32	128
	124	19	48		541	20	55
8.14 M	3829	165	547	17.2 M	11508	154	502
N4RJ	33	14	23	VE2USA	165	8	19
	120	25	72		800	9	17
M-S	152	30	73	M-S	1215	30	95
	500	34	120		1440	32	107
	500	32	116		1686	28	78
	82	19	46		1002	21	48
2.37 M	1387	153	450	8.6 M	6681	154	408

There you go, those are the scores of some of the "beacons" on the bands.

XN3BMV was having a ball explaining what the XN3 is, many thanked for the first Mexican QSO and then were dissapointed that it was only VE3. But it was a contact and precious points. The 40 meter band sounded like it had a squelch on it, you could only hear those contest machines with decent antennas, "little pistols" just were not there, until about the last three hours on Sunday night. Some signals were just unreal in the early afternoon, but you could not touch them (diode propagation?). HZ1AB, EX6S, UQ2GM and others kept calling CQ and the whole North American continent kept calling them and this was going on until we gave up. We just wonder if the same is going on to the west, that there are perhaps 500 VK/ZLs calling us and we do not hear them.

Down under contest club (VK) fired up from VK9MR, Melish Reef and drove us East Coasters bananas. The Saturday operator must have been tired or something, because the first morning he was working JAs when he was 20 over 9 here. When someone asked: "what about NA?" he said: "NA shut-up". Then he tried split, then he tried to spread them up, then he started by call areas, starting with zeros, than nines, than East Coast gave up. Fortunately the next morning some East Coast stations got lucky and got through.

The 40 meter band is basically a nice band. You can hear and work the whole world on it, except that it is poluted with all kinds of commercial stations and harmonics from soviet jammers. This creates a terrible mess in Europe, where all those stations are next door, and the garbage is just horrendous. The problem is - you can't tell them to QSY because they do not listen. They just broadcast their propaganda thinking that someone listens to it. Actually a good receiver with sharp filters will let you zero beat the suckers and listen for weak ones. Wouldn't it be nice if we had that band to ourselves? That is demonstrated down on the CW end, 50 kHz of CW is a completely different world! You can a hear lot of activity and if you have a 2 or 3 element beam and nicely around 100 foot mark, it sounds just like 20 meters. Lots of activity and it is open the whole night. The best times are around local sunset and sunrise, when signals peak, grey line ducts and stuff is just roaring in.

It must have been a VK6 field day during the contest. We all know how hard it is to get zone 29. In this contest there were at least six VK6s. Looks like VK6HD is promoting contesting in that part of the world. I have worked VK6HD, LK, OH, DU, IR, RZ. Thanks guys!

Many were asking: "where is the zone 02?".I must have worked at least 10 of them, the most active was the VE2USA (who were they anyway?) multi-single group that was present everywhere and made a nice score beating Canadian record.

Europeans were scarse, only the big guns were coming through until about last 3 hours of the contest, when it opened up a bit. Among the pleasant surprises were UA1OT (Franz Joseph Land), JW5E, HBØAON, OE2VEL/HBØ, C31MD, GJ3YHU, OHØBH and others. Africans with good signals were: FHØFLO, A22ME, CN8ES, D44BC, EL1M, EL8M, TU2OK, TR8JLD, TR8IG, TL8CM, ED9CM, ZS3HL, ZSs, 5N3RTF, 7X2LS, 3D6DX,DE. Pacific station were represented by FK8CR, T32AF, VK9MR, VK/ZLs, FWØBX, 5W1EJ, P29JS, VK9NL. 4K1GAG was on from zone 13, VU2, UA9, UAØ, K4YT/DU, EX6S, UD6MDX, HZ1AB and VS6DX with VS6DO from Asia.

It never fails, when the contest is over and you talk to others, then you find out what you missed, and what they never heard, called you on CQ. That's the way it goes and that's what makes it interesting. We also have to make a choice between working the QSO points or just getting the multipliers. All the multipliers without much to multiply are no good, unless you are after DXCC or WAZ. So you win some, you lose some. At the end maybe you even win something and if not, you had fun learning something. Next year we will do it better. (Probably won't work single VK6.)

Now the CW part of CQWW is coming, and we hope that we get decent conditions. Perhaps this not too bad phone weekend will repeat itself (27 days cycle). It is interesting to note that some contesters prefer to operate almost exclusively on CW. Personally I prefer CW contesting over phone any time. The bands are a lot cleaner, no splatters and garbage. We can fit more stations on the band, and we can sort them out better. We can hear and work weak signals long after they dissapear on SSB. It also takes one more skill to be good: the ability to receive and transmit the morse code. Some gadgets such as electronic keyers and keyboards, sharp filters and digital wonderradios are making it more enjoyable and easier for us. A good operator can make up for some "deficiencies" in station equipment and make a good score. Go for it! (VE3BMV)

WHY RECORDS?

Why not! As with any other decent sport, amateur radio contesting has its own competitions and we hams like to compare our efforts in the short and long term. Each individual contest is a chapter on its own. There we compete and compare our skills and wares with others. There is also an effort to make the best score of all time - set the record and something for others to shoot for - to become the king of the hill.

Many of us started to compete by chasing DX and DXCC totals. It is a competition! A competition to see how many countries we can find, work and get the QSL card. Then we submit the cards to ARRL, pray that the "country" will be "recognized" and see if it shows in the record tables - DXCC listings or Honor Roll listing. It took time, effort, skill and made one feel good about his/her accomplishment. We worked at it. Then came the "technology". Repeaters, nets, and above all - list takers. Many were so involved, that they did not realize what was happening. Especially list operations "did it". We wondered where the skill was? To get on the list, or to get a relay of our report from the "helper" on frequency. All of a sudden we realized that it was not the art and skill of finding and nailing the DX or new country, but more like shooting animals in the ZOO.

Many quickly realized that it "ain't no fun" and gave up that type of "competition". They got serious about contesting, scores, records and all that goes with it. We have our rules in the contests. There are some "loopholes" where the rules are not written clearly, some try to interpret them in their favor. This is why the contest committees have to be in touch with reality, technology and other things, in order to keep the rules clear and to preserve the integrity and fair play. We are self policing. Lets play ball by the rules and have fun and feel good about it. Otherwise it could be spoiled and poisoned for many of us.

The reasons why the CQ Contests became so popular are the good rules, stability and a dedicated team of Contest Committee members comprised of best. The All Time Records are meaningful because of this stability. Many times there were requests to change the rules to eliminate one or another favour. It looks like it does not matter how you change the rules, there will always be someone with advantage or disadvantage. This is changing with time too, density of contesters population, band conditions and many other factors. Rules are set, proven and any changes should be very carefully considered and discussed with the world's best before implementing them. Changes should be of such a nature so they do not lower the scores in the future to preserve integrity of all time records.

The most difficult task is to make a new record, be it world, continent or country. We not only fight the competition, but also, propagation conditions, This is the biggest factor in our conquest for record score. It can help us make the score last for years or to short of expectations.

Nothing is impossible. Quite often we hear that it was easy to do it from here, or there. But at times it is better to have 3 el. 40m beam at 150 ft. from North America, than 2 el. at 60 ft. from South America. Of course, keeping things eqnal, that 3 el. would do better from S. America, and beat his cousin in NA by about 20 - 30 %. It is quite often luck too. Quite often one mounts a super effort to beat that record, only to find out that there were another three contesters that exceeded his record breaking score. Such is life and competition. It is this unknown that fascinates us and keeps us trying for the best. There is a lot of room for improvement and almost a guarantee that records will keep improving. More stations get involved in contesting, antennas and equipment are improving, air fares are going down, we are getting older, fast talking younger operators can do better (but they will get married some day), etc.

Looking at the All Time Phone records in CQ WW DX Contest, we see the only change last year - 160m record. UP2BBT/U6V did something seemingly impossible.He smashed the old 1976 KV4FZ record of 37k. He did the same thing to the CW record. Obviously he analyzed the situation, and decided to operate from Asia, next door to Europe and took advantage of the increased activity on TOP band in Europe and three pointers. He improved the record by a factor of 5x. Probably the most incredible "beating" in the history of records! Congratulations!

Another remarkable score was from runner-up in the same category: LZ2CJ, who also beat the old world record and set a new European record. Now with sunspots coming down, less atmospheric noise and more people active on the lower bands, it is the time to have a closer look at those low band records. But that does not mean that the bands can not explode with super propagation on higher bands too. That could give one a chance to "fix" one of those records and make them stay there for another 5 or 8 years!

On the US scene, the battle is heating up. Six records were broken last year! Looks like some impressive hardware is going up all over the US. 3 element 40 meter beams are as common as the TH6 was 10 years ago. Sure makes 40m sound like 20!

AI6V operated by "hired" WA6VEF just topped the old K1AR record by about 20 k. 10 and 15 meter records were untouched, On 20 m, K1UO replaced the one year old K1KI record, topping it by about 30k.

The low bands are coming alive. N7DD placed his call sign for the third time into the living records table. He improved KOGU record by about 20k. We will see if Larry can crack the 80 and 160 m records. Hard, but not impossible. This is probably the only time in the history of US (continental) contesting that one station held three current records.

On the 80 m band, W1ZM operated by K1ZM took over the W1CF record (1978) by a nice margin of 60k points. The 160m record was taken by WA2SPL, who edged out the W8LRL record by 2k, thanks to working more DX contacts.

The flea power category was taken over by AA2Z/1 by 4k points from WB2ULI.

The "multi" categories will probably stay that way for a while.

The Canadian battleground noted two improvements. CI3BMV set a new 20 m record and stayed married. (XYL made him to miss about 2 hours, then she gave in and "let" him operate.) It could have been over 1M mark, but what the heck, it's only a hobby. This gives VE3BMV three current monoband phone records. On 40m, VO1CV set the new record by beating VE3KZ.

Looking at the records, canadian scores should be about 20 - 30 % higher than US scores. It will be interesting to watch the battles during the upcoming season, especially on the low bands. Who is going to take over? Congrats to all new and old kings of the hill!!! (VE3BMV)

CQ WORLD WIDE DX CONTEST-ALL TIME RECORDS-PHONE

Here are the All Time Phone records as they stand now. CQ World Wide DX Contest is unquestionably the most prestigious amateur contest operating event in the world. Some contesters go after the All Time records (besides trying to win a particular category), hoping to beat that super score and replace the old record holder. This is the toughest task any contester can face. The propagation can make or brake even the best planned effort. While at times it can give advantage to those with a bit of luck, being at the right place and with Murphy somewhere else.

A change in distribution of station activity can change the "balance of power". Such as: the JA - phenomena on the West Coast, 160m surge of activity in Europe, and of course being close to the equator and next door to the "busy" continent, where you can get lots of three pointers.

Get a pencil and paper, or better, a computer, analyze the scores, figure out how to fix them and GOOD LUCK, may the Sunspots be with you!

WORLD	CALL	YR	SCORE	QSO	ZON	DXC
ALL BAND	9Y4VT	82	11954696	7082	146	422
28 MHz	YV2AMM	82	1839004	3700	37	130
21	AHOAB	82	1923840	4509	36	108
14	VP2KAA	81	2011z85	4186	37	150
7	YV3BRF	82	5281930	1403	31	96
3.8	KV4FZ	75	275319	1297	23	80
1.8	UP2BBT/U6V	83	203416	1490	8	39
QRP 5W	TG9GI	82	1035693	1747	75	192
MULTI-SINGLE	9Y4W	82	16775034	8097	158	540
MULTI-MULTI	P41C	81	41957244	17718	173	625

UNITED STATES	CALL	YR	SCORE	QSO	ZON	DXC
ALL BAND	AI6V	83	3576528	2947	136	296
28 MHz	N7DD	80	754536	1730	36	113
21	N7DD	81	923945	1998	36	121
14	K1UO	83	727494	1417	34	140
7	N7DD	83	217830	701	33	73
3.8	W1ZM	83	177862	669	27	86
1.8	WA2SPL	83	18483	121	18	43
QRP 5W	AA2Z/1	83	509106	585	86	235
MULTI-SINGLE	W4QAW	82	4455190	2158	167	551
MULTI-MULTI	N2AA	79	13299750	6079	176	595

CANADA	CALL	YR	SCORE	QSO	ZON	DXC
ALL BAND	CZ6KW	79	3493300	3531	115	265
28 MHz	CZ6WQ	79	1182315	3241	34	115
21	VE3BMV	81	1130209	2376	38	141
14	CI3BMV	83	910976	2087	36	140
7	VO1CV	83	257712	953	26	92
3.8	XJ3EDC	75	141726	1030	19	50
1.8	VE3BMV	76	29750	449	11	23
QRP 5W	VE1AUT	79	87584	300	44	106
MULTI-SINGLE	CZ6ZT	80	6642405	5461	135	362
MULTI-MULTI	VE3KZ	78	10612755	6960	152	483

CQ WW DX CONTEST-ALL TIME RECORDS-CW

WORLD	CALL	YR	SCORE	QSO	ZON	DXC
ALL BAND	9Y4VT	83	7153434	4961	127	359
28 MHz	LU8DQ	79	1033399	2775	34	93
21	LU8DQ	81	1359712	2993	37	116
14	VP2KAA	80	1244782	3111	37	117
7	VP2KAA	83	837366	2461	30	104
3.5	VP2KAC	83	332880	1302	28	86
1.8	UP2BBT/U6V	83	83160	481	14	49
QRP	UP2BIM	82	899932	1351	83	279
SINGLE TX	NP4A	82	11648565	6881	168	515
MULTI TX	P42E	82	23295408	12315	161	475
CLUB	FRANKFORD RADIO CLUB		79	173821640		

UNITED STATES	CALL	YR	SCORE	QSO	ZON	DXC
ALL BAND	K1GQ	81	3276768	2111	138	390
28 MHz	N4WW	82	394940	1094	33	97
21	W1RM	82	483560	1196	33	107
14	N7UA	80	626400	1634	34	101
7	KORF	81	337280	949	31	93
3.5	W1ZM	81	151497	610	22	71
1.8	K1PBW	76	22626	157	15	39
QRP	AC2U	81	591856	728	84	200
MULTI-SINGLE	N4AR	81	4564350	2485	152	478
MULTI-MULTI	W2PV	81	10431729	5267	166	527
CLUB	FRANKFORD RADIO CLUB		79	173821640		

CANADA	CALL	YR	SCORE	QSO	ZON	DXC
ALL BAND	VE3IY	81	2607795	2563	113	292
28 MHz	VE3BMV	80	504063	1505	30	97
21	VE3BMV	81	653856	1665	35	112
14	VE3BMV	82	662454	1730	36	113
7	VE3BMV	83	361845	1149	33	96
3.5	CY3BMV	77	102828	575	22	60
1.8	VE3BMV	76	30258	358	12	29
QRP	VE3KZ	81	261632	450	70	154
MULTI-SINGLE	VE3PCA	81	3711956	2794	135	373
MULTI-MULTI	VE3PCA	83	2493424	2575	121	291
CLUB	ONTARIO CONTEST CLUB		83	17566167		

WORLD records were improved in four categories last year. Dick Norton, N6AA operating from 9Y4VT established a new Single OP, All band record.

The single band records were improved on 40 m and down. Paul Newbery, N4PN operated from his contest home south - VP2KAA and established a new 40 m record with incredible score of 1.2 M points. His "next door" neighbour VP2KAC, operated by Hugh Valentine, N4RJ established a new target on 80 m. Arvydas Vingrys, UP2BBT/U6V, travelled south to UF6 land to fix the old record of KV4FZ on 160 m.

All this was done when bands were not exactly in the best of shape last year. If you were further away from the equator, you felt it. The best proof of bad propagation was that no US records were set.

On the Canadian scene only VE3BMV set the 40 m record which makes him "owner" of all the Canadian single band CW records. It is probably the first time anyone has ever done this. The VE3PCA crew set a new Multi-Multi mark.

Announcing:

The 1984 CQ World-Wide DX Contest

Phone: October 27-28 & C.W.: November 24-25
Starts 0000 GMT Saturday Ends 2400 GMT Sunday

I. OBJECTIVE: For amateurs around the world to contact other amateurs in as many zones and countries as possible.

II. BANDS: All bands, 1.8 through 28 MHz.

III. TYPE OF COMPETITION:

1. Single Operator (single band and all band). Single operator stations are those at which one person performs all of the operating, logging, and spotting functions. The use of DX spotting nets or any other form of DX alerting assistance places the station in the Multi-Operator category.

2. Multi-Operator (all band operation only).

a. Single Transmitter, only one transmitter and one band permitted during the same time period (defined as 10 minutes). *Exception:* One—and only one—other band may be used during the same time period if—and only if—the station worked is a new multiplier. *Logs found in violation of the ten-minute rule will be automatically reclassified as multi-multi to reflect their actual status.*

b. Multi-Transmitter (no limit to transmitters but only one signal per band permitted).

c. *All transmitters must be located within a 500 meter diameter or within the property limits of the station licensee's address, whichever is greater. The antennas must be physically connected by wires to the transmitter.*

3. QRPp (single operator only). Power must not exceed 5 watts output. Stations in this category will be competing only with other QRPp stations for awards.

4. Team Contesting. A team consists of any five radio amateurs operating in the single operator category. A person can be on only one team per mode. A team **must operate** from two continents. Competing on a team will not prevent any team member from submitting his personal score for a radio club. A team score will be the sum of all the team member scores. S.S.B. and C.W. teams are totally separate. That is, a member of an S.S.B. team can be on a totally different C.W. team. A list of a team's members must be received by October 15 for S.S.B. and November 15 for C.W. Send the list to *CQ*, Att: Team Contest, 76 North Broadway, Hicksville, NY 11801 U.S.A. Awards will be given to the top five teams. A list of a team's members' scores plus the total team score must be submitted to *CQ* by the normal contest log deadlines.

IV. NUMBER EXCHANGE: Phone: RS report plus zone (i.e., 5705). C.W.: RST report plus zone (i.e., 57905).

A station in a zone or country different than that indicated by its call sign is required to sign portable.

V. MULTIPLIER: Two types of multiplier will be used.

1. A multiplier of one (1) for each different zone contacted on each band.

2. A multiplier of one (1) for each different country contacted on each band.

Stations are permitted to contact their own country and zone for multiplier credit. The *CQ* Zone Map, DXCC country list, WAE country list, and WAC boundaries are standards.

VI. POINTS: 1. Contacts between stations on different continents are worth three (3) points.

2. Contacts between stations on the same continent but different countries, one (1) point. *Exception:* For North American stations *only*, contacts between stations within the North American boundaries count two (2) points.

3. Contacts between stations in the same country are permitted for zone or country multiplier credit but have zero (0) point value.

VII. SCORING: All stations: the final score is the result of the total QSO points multiplied by the sum of your zone and country multiplier.

Example: 1000 QSO points × 100 multiplier (30 Zones + 70 Countries) = 100,000 (final score).

VIII. AWARDS: First place certificates will be awarded in each category listed under Sec. III in every participating country and in each call area of the United States, Canada, Asiatic USSR, and Japan.

All scores will be published. To be eligible for an award, a Single Operator station must show a minimum of 12 hours of operation. Multi-operator stations must operate a minimum of 24 hours. A single-band log is eligible for a single-band award *only*. If a log contains more than one band it will be judged as an all-band entry, unless specified otherwise.

In countries or sections where the returns justify, 2nd and 3rd place awards will be made.

All certificates and plaques will be issued to the licensee of the station used.

IX. TROPHIES & PLAQUES (Donors)

PHONE

Single Operator, All Band
World - Bill Leonard, W2SKE
World - QRPp - Adrian Weiss, K8EEG/Ø
U.S.A. - Potomac Valley Radio Club
*Canada - Jack Baldwin, VE7RG
Carib./C.A. - Alex M. Kasevich, VP2MM
Europe - Thomas J. Peruzzi, Jr., W4BVV
Africa - Gordon Marshall, W6RR
*Asia - Japan CQ Magazine
*Japan - Japan Crazy Contesters Club
Oceania - No. California DX Club
S. America - David Novoa, KP4AM

Single Operator, Single Band
World - K2HLB Memorial, No. Jersey DX Assoc.
*World - 21 MHz - Lee Wical, KH6BZF
World - 3.8 MHz - Fred Capossela, K6SSS

U.S.A. - 28 MHz - Donald Thomas, N6DT
U.S.A. - 3.8 MHz - Arnold Tamchin, W2HCW
U.S.A. - So. California DX Club
*Canada - Gene Krehbiel, VE7KB
Carib./C.A. - Pedro Piza, Jr., NP4A - KP4ES Memorial
Europe - 28 MHz Zone 14 - A. G. Anderson, GM3BCL
Japan - 21 MHz - DX Family Foundation

Multi-Operator, Single Transmitter
World - Don Wallace, W6AM
U.S.A. - Theodore Pauck, Jr., K8NA
*Canada - Calgary Amateur Radio Assoc.
Europe - Bob Cox, K3EST

Multi-Operator, Multi-Transmitter
World - Radio Club Venezolano
U.S.A. - Dale Hoppe, K6UA
Europe - OH-DX-RING - OH2AM

Contest Expeditions
World - Single Opr. - Stuart Meyer, W2GHK
World - Multi-Opr. - DJ3NG & DJ4EI Memorial (SGDX & CDX Groups)

Special - Single Operator, Phone/C.W.
World - All Band - John Knight, W6YY
World - Single Band - Yuri Blanarovich, VE3BMV

C.W.

Single Operator, All Band
World - Albert Kahn, K4FW - W2AB Memorial
World - QRPp - Gene Walsh, N2AA
U.S.A. - Frankford Radio Club
*Canada - Canadian DX Association
Europe - Edward Bissell, W3AU
Africa - Gordon Marshall, W6RR
*Asia - Japan CQ Magazine
*Japan - Japan Crazy Contesters Club
Oceania - Maui Amateur Radio Club

Single Operator, Single Band
World - W2JT Memorial, No. Jersey DX Assoc.
World - 3.5 MHz - Fred Capossela, K6SSS
World - 1.8 MHz - Chip Margelli, K7JA - KP4ES Memorial
U.S.A. - No. Illinois DX Association
*Canada - Canadian Amateur Radio Federation
Carib./C.A. - DX Club of Puerto Rico
Australia - 14 MHz - Jay Carr, W6FAY
*Japan - 21 MHz - DX Family Foundation

Multi-Operator, Single Transmitter
World - Anthony Susen, W3AOH
U.S.A. - Douglas Zwiebel, KR2Q

Multi-Operator, Multi-Transmitter
World - Hazard Reeves, K2GL
U.S.A. - James Rafferty, N6RJ
Europe - OH-DX-RING - OH2AM

Contest Expeditions
World - Single-Opr. - Yankee Clipper Contest Club
World - Multi-Opr. - Bill Schneider, K2TT

Clubs
World - Phone/C.W. - CQ Magazine

Special—Single Operator—Most QSO's
World - All Band - KV4AA Memorial (14270 kHz Group)

**Trophy supplied by Donor.*

Trophy winners may win the same trophy only once in a two-year period. In the event that the same station wins the same category in two consecutive years, a special *CQ* Magazine Championship plaque will be awarded the second year. The sponsored trophy in that category will then be awarded to the second-place finisher in that category if the returns justify the award.

A station winning a World Trophy will not be considered for a sub-area award. That Trophy will be awarded to the runner-up of that area.

The Canadian and Carib./C.A. awards are for residents *only*.

**A resident is defined as one living in that country with an established Post Office address.

X. CLUB COMPETITION:

1. The club must be a local group and not a national organization.

2. Participation is limited to members operating within a local geographic area defined as within a 275 km radius from center of club area (except for DXpeditions especially organized for operation in the contest).

3. To be listed, a minimum of 3 logs must be received from a club and an officer of the club must submit a list of participating members and their scores, both on phone and c.w.

XI. LOG INSTRUCTIONS:

1. All times must be in GMT.

2. All sent and received exchanges are to be logged.

3. Indicate zone and country multiplier only the FIRST TIME it is worked on each band.

4. Logs must be checked for duplicate contacts, correct QSO points and multipliers. Submitted logs must have duplicate contacts clearly shown. The *original* log may be requested by the Contest Committee if further cross-checking of the log is necessary.

5. Use a separate sheet for each band.

6. Each entry must be accompanied by a summary sheet showing all scoring information, category of competition, contestant's name and address in BLOCK LETTERS, and a signed declaration that all contest rules and regulations for amateur radio in the country of operation have been observed.

7. Sample log and summary sheets and zone maps are available from *CQ*. A *large* self-addressed envelope with sufficient postage or IRC's must accompany your request.

If official forms are not available, make up your own 80 contacts to the page on 8½" × 11" paper.

8. All entrants are required to submit cross-check sheets for each band on which 200 or more QSO's were made. All other entrants are encouraged to submit cross-check sheets.

9. Duplicate contact penalty: up to 1%—three (3) additional contacts removed; 1% to 3%—ten (10) additional contacts removed; over 3% is grounds for possible disqualification.

10. QRPp stations must indicate same on their summary sheets and state the actual maximum power output used, with a signed declaration.

XII. DISQUALIFICATION: Violation of amateur radio regulations in the country of the contestant, or the rules of the contest; unsportsmanlike conduct; taking credit for excessive duplicate contacts; unverifiable QSO's; or unverifiable multipliers will be deemed sufficient cause for disqualification. (Incorrectly logged calls will be counted as unverifiable contacts.)

An entrant whose log is deemed by the Committee to contain a large number of discrepancies may be disqualified from eligibility for an award, both as a participant operator or station, for one year. If an operator is disqualified a second time within 5 years, he will be ineligible for any *CQ* contest awards for 3 years.

Actions and decisions of the *CQ* Contest Committee are official and final.

XIII. DEADLINE: All entries must be postmarked NO LATER than December 1, 1984 for the Phone section and January 15, 1985 for the C.W. section. An extension may be given if requested. Indicate phone or c.w. on envelope.

Both phone and C.W. logs should be sent to *CQ* Magazine, 76 North Broadway, Hicksville, NY 11801.

***Except the Gordon Marshall, W6RR, award.*

GARTG SSTV Contest

0600 to 0600 UTC, Sat.-Sun., Oct. 6–7

This is the fifth world-wide SSTV contest sponsored by the German Amateur Radio Teleprinter Group.

Use all bands, 3.5 through 28 MHz, in that portion of the band reserved for SSTV. A 6-hour off time must be taken at any time during the contest.

Exchange: Call sign, RST, message number (001, etc.). GARTG members will also include their membership number. Exchange must be made exclusively in the SSTV mode.

Scoring: Contacts on 80, 40, and 20 meters, 1 point; on 15 meters, 2 points; and on 10 meters, 5 points. Add 50 bonus points for each contact with a GARTG member station. Same station may be worked on each band.

Multiplier: Each country (WAE and ARRL list) and each call area in JA, PY, VE/VO, VK, W/K worked on each band.

Final Score: QSO points × countries × continents plus bonus points.

There is also an s.w.l. division with the same scoring as outlined above. S.w.l. logs must contain both the report sent and received by the station logged.

Awards: Free one-year subscription to "RTTY," official organ of the GARTG, to the three top scorers.

Use a separate log sheet for each band and a summary sheet showing the scoring, etc. All entries must be received by December 10th and go to Contest Manager, Wolfgang Punjer, DL8VX, P.O. Box 90 11 30, D-2100 Hamburg 90, Fed. Rep. of Germany.

ARRL QSO Party

C.W.: Oct. 6–7 Phone: Oct. 13–14
1800Z Saturday to 0600Z Sunday

This event is similar to the annual Open CD Party, which has been phased out, and it is open to *all* ARRL members. Operate a maximum of 10 hours out of the 12-hour period. Off times must be at least 30 minutes and must be clearly indicated in the log.

Exchange: Your "status" and ARRL section (MBR member, ORS official relay station, etc.).

Scoring: Total QSO's from all bands times number of ARRL sections worked (maximum of 74). Phone and c.w. are separate and require separate logs. A dupe sheet is also required if you make more than 200 contacts.

Referring you to a current issue of *QST* for more details is academic, since all members of course receive *QST*. Anyway, be sure to get your entry to the ARRL, 225 Main Street, Newington, CT 06111 within a month of the above dates.

VK/ZL/Oceania DX Contest

Phone: Oct. 6–7 C.W.: Oct. 13–14
1000Z Saturday to 1000Z Sunday

The following rules are for stations other than VK/ZL. Oceania stations can work anyone. The rest of the world is limited to working VK/ZL and Oceania stations. The same station may be worked on each band for QSO and multiplier credit.

Exchange: RS(T) plus a three-figure QSO number starting with 001.

Scoring: Same for everybody, 2 points per QSO.

Multiplier: Each VK/ZL and Oceania call area on each band.

Final Score: Total QSO points from all bands times the sum of the multipliers from each band.

Awards: Attractive color certificates to the winners in each country and each call area in the US, USSR, and Japan. Awards are for single operator, all-band operation only. Additional awards if returns and conditions justify.

There is an s.w.l. section. Only VK, ZL, or Oceania stations are reported. Call of station being worked and RS(T) sent and received must be reported. Scoring same as above, but phone and c.w. scores are combined for awards.

Include a summary sheet showing the scoring and the usual signed declaration. One IRC will get you a copy of the results.

This year the contest is being run by the NZART, and all entries must be received by the contest manager before January 31, 1985. They go to: Jock White, ZL2GX, 152 Lytton Road, Gisborne, New Zealand. (Another IRC to Jock will also get you a list of over 12 awards sponsored by the NZART.

Columbus Day Special Event

15M Phone: 1400Z–2400Z Sat., Oct 6
40M Phone: 1400Z–2400Z Sun., Oct 7

The Columbus ARA calls this a triple salute to (1) the explorer Christopher Columbus, (2) the city of Columbus, Ohio, and (3) amateur radio worldwide.

Participation will be between Columbus, Ohio, and area suburbs with other worldwide areas, on 21375 and 7240 MHz. (Columbus stations may also contact other in-city stations.)

Exchange: Signal report, QTH, and name.

Scoring: One point per QSO, 6 points if it's with club station W8TO. A final score of at least 10 must be submitted to be eligible for a certificate.

S.w.l.'s are also eligible on a heard-basis score.

The top-scoring Columbus station wins a plaque.

Include an s.a.s.e. (3 IRCs for DX) when applying for a certificate. Applications must be received within 120 days by: Amateur Radio Station W8TO, Att. Special Event Coordinator, 280 East Broad St., Columbus, OH 43215.

Columbus Day International

1200Z Sat. to 2400Z Sun., Oct. 13–14

Here's another Columbus Day Celebration. This one is sponsored by the Miami Havana Lions Club. Rules are not too specific, but the objective is to work members of the club who will be assigned official numbers for identification. Participation will be on an international basis.

Exchange will be a signal report and QTH on 10–80 meters phone and c.w. Club members will be found on 7230, 14250, 21250, and 28915 MHz. English, Spanish, or Portuguese will be spoken. A minimum of 5 members must be worked to receive the Special Club Award (s.w.l.'s may also apply).

Send your log or QSL's and $2.00 or 6 IRCs to: Miami Havana Lions Club, Columbus Day International Contest, P.O. Box 674, Miami, FL 33135.

ARCI QRP Contest

1200Z Sat. to 2400Z Sun., Oct. 13–14

This is the fall edition and 23rd anniversary of the QRP Amateur Radio Club International. This year activity will be found on c.w. and/or s.s.b. Participation is limited to 24 hours of the contest period, and one mode only.

Exchange: RS(T) and state, province, or country. Members will include their number, non-members their power output.

Scoring: Contacts with members 5 points; non-members 2 points if in same continent, 4 points if in a different continent. The same station may be worked on each band and mode for QSO and multiplier credit.

There is an output power multiplier:
c.w. 4–5 watts, s.s.b. 8–10— × 2.
c.w. 3–4 watts, s.s.b. 6–8— × 4.
c.w. 2–3 watts, s.s.b. 4–6— × 6.
c.w. 1–2 watts, s.s.b. 2–4— × 8.
c.w. less than 1 watt, s.s.b. 2 watts—

The following bonus multipliers are also available: × 2 if using solar or wind power, × 1.5 for battery power. Must be used for duration of contest.

Final Score: Total per band. QSO points × (states + provinces + countries) × power multiplier × bonus if any. Add totals from each band worked for final score.

Frequencies: C.W.—1810, 3560, 7040, 14060, 21060, 28060, 50360, S.S.B.—1810, 3985, 7285, 14285, 21385, 28885, 50385. Novice—3710, 7110, 21110, 28110.

Awards: Certificates to the highest scorers in each state, province, and country with two or more entries. All entries will be considered for the Triple Crown QRP Award. In addition, Adrian Weiss, WØRSP, is sponsoring a special *Milliwatt* certificate to be awarded to the highest scoring station in the less than 1 watt category, provided that there are two or more entries in that category.

Use a separate sheet for each band; include a summary sheet showing the scoring, equipment description, and other essential information; and include a large s.a.s.e. for a copy of the results. Log forms are also available.

Logs must be received by November 12th and go to: ARCI QRP Chairman, Gene Smith, KA5NLY, 8201 Chatham Dr., Little Rock, AR 72207.

Pennsylvania QSO Party

1600Z Sat. to 0500Z Sun., Oct. 13–14
1300Z to 2200Z Sun., Oct. 14

This is the 27th annual party sponsored by the Nittany ARC of State College, Pennsylvania. The same station may be worked on each band and mode for QSO points. PA stations may work other PA stations for QSO and multiplier credit. Mobiles may be worked on each county change.

Exchange: RS(T), three-digit QSO number, and QTH. County for PA, ARRL sections for others.

Scoring: One point for s.s.b. contacts, 1.5 points for c.w., and 2 points for c.w. on 80 and 160.

PA stations multiply total by ARRL sections + PA counties + 1 DX country worked. Others use PA counties for their multiplier (maximum of 67).

Mobiles add 500 bonus points for each county operated from, minimum of 10 QSOs. Mobiles on county lines give one QSO number but get credit for two multipliers.

Frequencies: C.W.—1810 and 40 kHz up from bottom edge of each c.w. band. S.S.B.—1850, 3980, 7280, 14280, 21380, 28580. Novice—10 up from bottom of each Novice band. Mobile—5 kHz below listed frequencies. Try 160 at 0300Z.

Awards: Will be made in five classes—mobile, and QRP (maximum 5 watts). Certificates to winners in each county, each section, and club (minimum of 3 members and 20 QSOs). Plaques to top scorers in both eastern and western PA, out-of-state, both multi's, mobile, VE/VO, and QRP *(quite a selection—ed.)*.

Include a summary sheet with your entry showing the scoring, a check list of counties or sections worked, and a dupe sheet if you make 100 or more contacts. There is a severe penalty of 100 points deducted for each dupe that has not been removed.

Official log forms are recommended and are available from W3HDH. For a copy of the results send 50¢ (no s.a.s.e.).

Mailing deadline for entries is November 15th to: Douglas R. Maddox, W3HDH, 1187 S. Garner St., State College, PA 16801.

Rhode Island QSO Party

1700Z Sat. to 0500Z Sun., Oct. 13–14
1300Z Sun. to 0100Z Mon., Oct. 14–15

This one is again being sponsored by the East Bay AWA (WA1YPN). The same station may be worked on each band and each mode. RI stations may contact other RI stations for QSO points.

Exchange: RS(T) and QTH. City or town for RI; state, province, or DX country for others.

Scoring: Phone QSOs are worth 2 points, c.w. 3 points, and Novice/Tech. 5 points.

RI stations multiply total QSO points by the number of states, VE provinces, and DX countries worked. Others by the different RI cities and towns worked for their final score (39 cities and towns).

Frequencies: C.W.—1810, 3550, 3710, 7050, 7110, 14060, 21050, 21110, 28050, 28110. Phone—3900, 7260, 14300, 21360, 28600, 50110, 144.2, and 146.52. (Use of f.m. simplex is encouraged. No repeaters.)

Awards: Certificates to the top-scoring single operator station in each RI county, and each state, province, and country. The top-scoring Novice/Tech. in RI and out of state will also be rewarded, as will the winning RI multi-operator station.

Include a summary sheet with your entry showing the scoring and other essential information, and an s.a.s.e. for a copy of the results.

Mailing deadline is November 15th to: East Bay AWA Inc., P.O. Box 392, Warren, RI 02885.

RSGB 21/28 MHz Phone Contest

0700 to 1900 GMT Sunday, Oct. 14

It's the world working the British Isles on 21 and 28 MHz.

The same station may be worked on each band for QSO and multiplier credit. There are a total of 42 prefixes available on each band. Following are the rules for areas other than the British Isles.

Sections: Single operator and multi-operator, both bands only, and s.w.l.

Exchange: RS report plus a progressive QSO number starting with 001.

Scoring: Each contact with a B.I. station is worth 3 points. Multiply total QSO points from each band by the sum of B.I. prefixes worked on each band (maximum of 42 per band). The GB prefix does not count for QSO or multiplier.

Unmarked duplicate contacts will be penalized 10 times the points claimed. Logs containing more than 5 unmarked duplicates will be disqualified.

There is also an s.w.l. section. Only B.I. stations are to be logged. Scoring is the same as indicated above. The same call sign may appear once only in every three contacts, except when the logged station is a new multiplier.

Awards: Overseas stations will be awarded certificates to the leading station in each country and the leading station in the multi-operator section, and to the s.w.l. winner in each country.

Separate log sheets are required for each band. Include a summary sheet showing the scoring, prefixes worked, and a signed declaration that rules and regulations have been observed. Logs must be received by December 1st. This year they go to: RSGB HF Contest Committee, c/o D. Lawley, G4BUO, 220 Shipbourne Rd., Tonbridge, Kent TN10 3EL, England.

RSGB 21 MHz CW Contest

0700 to 1900 GMT Sunday, Oct. 21

Like the 21/28 MHz Phone Contest, the activity in this one is between the British Isles and the rest of the world. Competition is limited to single operator stations only. There is a separate QRP section in which power input must not exceed 10 watts, and there is also an s.w.l. section.

The following rules are for areas other than the British Isles.

Exchange: RST report plus a progressive QSO number starting with 001.

Scoring: Each contact with a B.I. station is worth three points. Multiply total QSO points by the number of B.I. prefixes worked (G2, G3, GD3, etc.). A maximum of 42 is possible. (GB does not count for QSO or multiplier.)

Unmarked duplicate contacts for which credit has been taken will be penalized ten times the points claimed. Logs containing more than five unmarked duplicates will be disqualified.

Only British Isles stations are to be logged by overseas s.w.l.'s. The same call may be reported only once in every three contacts, unless the logged station is a new multiplier. Scoring is the same as above.

Awards: Certificates to the leading station in each overseas country, both transmitting and s.w.l.

Include a summary sheet with a list of prefixes worked, station description, the usual signed declaration, and your name

and address in block letters. Logs from overseas must be received by December 31st and go to: RSGB HF Contests Committee, c/o R. A. Treacher, BRS 32525, 79 Granby Road, Eltham, London SE9 1EH, England.

YLRL Anniversary Party

C.W.: Oct. 17–18 Phone: Oct. 31–Nov. 1
1800Z–1800Z Wed.–Thurs.

This is the 45th annual party run by the YL Radio League. It is open to all YL's around the world, and activity is between YL's only on all bands, 3.5 through 28 MHz. Phone and c.w. are separate contests and require separate logs and awards.

Exchange: QSO no., RS(T), and ARRL section. DX stations will indicate their country.

Scoring: One point per QSO between stations within an ARRL section and between DX stations. Two points if the QSO is between a DX station and an ARRL section station. The same station may be worked *once only* regardless of the band.

Multiplier: Is figured from the number of ARRL sections and DX countries worked. There is also a low power multiplier of 1.25 if power input is 150 watts or less on c.w., 300 watts p.e.p. on s.s.b.

Final Score: Total QSO points from all bands times the ARRL sections and DX countries worked times the power multiplier.

For each duplicate contact that is removed from the log in the course of checking, a penalty of three additional and equal contacts will be exacted.

Frequencies: C.W.—3555, 7055, 14055, 21195, 28195. S.S.B.—3955, 7255, 14295, 21395, 28595. (Plus or minus 15 kHz.).

Awards: Gold cups to the top scorers in each contest. A plaque to the highest combined phone/c.w. score, and the Corcoran and Hagen memorial plaques. Certificates to the first, second, and third place overall winners and in each U.S. and VE call area and DX country. Only YLRL members are eligible for the cup and plaques.

Logs must be received no later than December 10th, and this year go to: Marty Silver, NY4H, 3118 Eton Road, Raleigh, NC 27608.

CLARA AC/DC Contest

1800Z Sat. to 1800Z Sun., Oct. 20–21

Sponsored by the Canadian Ladies Amateur Radio Association, this contest is open to both YL's and OM's.

Each station may be worked twice, once on c.w. and again on phone, or on two different bands.

Exchange: RS(T), QTH, and name.

Scoring: For CLARA members, 1 point per contact with non-members, 2 points with members, and 3 points if with a bonus station. C.w. contacts are worth double the above point value. Non-member scoring is the same as above, except only CLARA member contacts are to be counted. YL bonus stations will identify in their exchange.

Multiply total QSO points by the number of Canadian provinces/territories worked for final score.

Frequencies: Phone—3775, 3900, 7150, 14160, 14280, 21300, 28488, 28588. C.W.—3690, 7035, 14035, 21035. 28035.

Awards: Plaques to 1st place winners, both members and non-members, and 2nd and 3rd place certificates. All entries are eligible for the mini prize drawing.

Mailing deadline for all entries is December 15th, and they go to: Muriel Foisy, VE7LQH, RR #1, Pender Island, B.C. Canada V0N 2M0.

Scouts Jamboree On The Air

Starts: 0001 Local Time Sat., Oct. 20
Ends: 2359 Local Time Sun., Oct. 21

This is the 27th annual Jamboree sponsored by the World Bureau of Scouts. Activity is world wide and includes not only Scout units, but Girl Scouts and Guides, too. This is not a contest, but an opportunity for Scouts or anyone interested in Scouting to get together on the air and exchange greetings. Amateurs can invite members of Scout units or individuals to visit their stations or clubs and see how ham radio operates.

No specific exchange, no scoring, and no logs are required. However, participating post-card-size certificates issued by the World Scout Bureau are available. They may be requested before the JOTA weekend for distribution and included with your QSL's of JOTA contacts. Send a large s.a.s.e. to: Jamboree on the Air, 1325 Walnut Hill, Irving, TX 75062; 20¢ postage for 20 cards, 17¢ for each additional 8.

Suggested Frequencies: Phone—3940, 7290, 14290, 21360, 28990. C.W.—3590, 7030, 14070, 21140, 28190. Also Novice bands, SSTV, and RTTY.

I suggest you write to W2GND for additional details. Stateside participants send reports to Harry A. Harchar, W2GND, 216 Maxwell Ave., Hightstown, NJ 08520.

Red River DX Assoc. WW "Sprint"

1200Z–2400Z Sun., Oct. 21

The Red River DX Association is sponsoring this World-Wide DX Sprint Contest as an equipment check for the coming contest season and to promote its "Missionary Outreach" project. For more information on the project, write to Henry Eschmann, WA7TZE, 5116 Fairway Blvd., Wichita Falls, TX 76310. Activity will be on all h.f. phone bands, single operator only.

Exchange: Signal report and QSO number, 001, etc.

Scoring: One point per QSO, total multiplied by the number of different DXCC countries worked.

No penalty for up to three dupes. Over that amount a like number of valid contacts will be removed from the score.

Awards: The first three places, regardless of country, will be awarded Sprint Trophies. Certificates of participation indicating score and placement will be issued to all entries. A fee of $3.00 (or 5 IRC's for DX stations) is requested to cover costs (also to help the association in its missionary project).

Send logs to the Red River DX Assoc. "Sprint" Contest, P.O. Box 54, Wichita Falls, TX 76307.

HA QRP C.W. Contest

0000Z Thurs. to 2400Z Wed., Nov. 1–7

This is a new one organized by the Radiotechnika Journal of Hungary, and it should be a challenge to QRPers, since activity is confined to 80 meters (3500 to 3600 kHz) only. Power input must not exceed 5 watts input, and both single operators and multi-operators can participate.

Exchange: RST, QTH, and name.

Scoring: Contacts within own country 1 point; with other countries 2 points. Final score is total QSO points times the number of DXCC countries worked.

All participants will receive a Memorial Leaf. Outstanding scorers will receive the *Radiotechnika Journal* for one year.

Send your log with a description of your station and your transmitter to: Radiotechnika, Budapest PF 603, H-1374, Hungary, before the November 21st deadline.

High Speed Club CW Contest

Two Periods (UTC)
0900–1100 & 1500–1700 Sun., Nov. 4

The High Speed Club, founded in 1951 by members of the DARC, holds two contests each year. The object is to promote c.w. operating and club activity. There is a power limitation in the contest of 150 watts output. Both members and non-members, as well as s.w.l.'s, are invited to participate.

Exchange: RST and a QSO number starting with 001. Members will also include their membership number.

Scoring: One point per QSO multiplied

by the number of DXCC countries worked on each band.

Frequencies: All five bands, 3.5–28 MHz, using the lower 10 to 20 kHz of each band. *(What about the U.S. stations who do not hold an Extra class license?—ed.)*

Awards: Awards will be given to first-, second-, and third-place winners in each country and continent.

Logs go to Detlef Reineke, DK9OY, Katenser Hauptstr. 2, D 3162 Uetze -Katensen, West Germany, and must be postmarked no later than 4 weeks after the end of the contest. Include an s.a.s.e. or IRC to DK9OY for a list of the results.

(The High Speed Club now has over 1200 members in 50 countries all over the world. Besides this contest they also have other on-the-air activities and awards. You don't have to be a high-speed code artist to join the club; accuracy and a smooth "fist" are more important. For more details send one IRC and a self-addressed envelope to the club's secretary, Ernst Manske, DL1PM, Ansgarstr. 14, D 2105 Seevetal 11, West Germany.)

"Corona" 10 Meter RTTY

1100Z to 1700Z Sun., Nov. 3

This is the fourth of a series of 10 meter RTTY contests sponsored by the DARC. As the title identifies, activity will be on 10 meters only in that portion of the band used for RTTY. Complete rules were given in the August column.

Entries go to: Klaus K. Zielski, DF7FB, P.O. Box 11 47, D-6455 Erlensee, West Germany. They must be received within 30 days after the end of the contest.

DARC WAE RTTY Contest

0000Z Sat. to 2400Z Sun., Nov. 10–11

Rules for the WAEDC RTTY Contest are the same as for the European c.w. and phone contests held in August and September. Complete rules were in the August issue, and since they are quite long, they will not be repeated here.

There is one main difference, however. In the RTTY contest, exchanges are not limited to between Europeans and non-Europeans. Contacts between stations in other continents as well as one's own continent are also permitted, but not between stations in the same country.

The multiplier is counted according to the ARRL and the WAE country list. In addition, each call area in JA, PY, VE/VO, VK, W/K, ZL, ZS, and UA9-0 will also be considered as a multiplier.

The multiplier point per band is the same as shown for the c.w. and phone contests, except for countries within one's own continent. These are counted as one per band only, regardless of the band.

Certificates will be awarded to the winners in each class and each country. Continental leaders will be awarded the WAEDC plaque.

It is suggested that you use the official DARC log forms. A large s.a.s.e. (IRC's) to the address below will get you a supply.

Mailing deadline for logs is December 15th and they go to: WAEDC Contest Committee, P.O. Box 1328, D-8950 Kaufbeuren, West Germany.

ARRL Sweepstakes

C.W.: Nov. 3–5 Phone: Nov. 17–19
Starts: 2100Z Sat. Ends: 0300Z Mon.

This is the 51st running of the Sweepstakes, making it the oldest domestic competition going, and it really stirs up a lot of activity.

Operation is limited to stations in ARRL sections, which also includes the West Indies section (KP4, KV4, etc.) and U.S. possessions in the Pacific. Operation is limited to 24 out of the 30 hour contest period. Times off may not be less than 30 minutes and must be clearly indicated in your log.

In order to minimize QRM to non-contesters it is recommended that operation be confined to certain portions of the bands. It is recommended that you check *QST* for details.

There are several other regulations, including a cross-check sheet if you make 200 or more contacts. A large s.a.s.e. (37¢ in postage) will get you the "SS Package" and Operating Aid #6 with enough log and summary sheets for an average outing.

Exchange: QSO no., power class, call, last two digits of year first licensed, and your ARRL section.

Stations using 150 watts or less are classed "A" and over 150 watts "B." The same station may be worked once only regardless of the band.

Scoring: Each completed QSO is worth 2 points. The multiplier is derived from the number of ARRL sections, plus VE8, worked (maximum of 74).

Awards: The usual certificates in each class and mode for single operator stations in each section and multi-operator stations in each division.

Logs must be received no later than December 21st and go to: ARRL Communications Dept., 225 Main Street, Newington, CT 06111.

Int. Police Assn. Contest

C.W.: Sat., Nov. 3 S.S.B: Sun., Nov. 4
0600Z–1000Z & 1400Z–1800Z

The International Police Assn. Radio Club Contest is again organized by the German Chapter. There have been some changes made in the rules.

Participation is by members and non-members in three classes: single operator, multi-operator, and s.w.l. The same station may be worked in each band and mode for QSO and multiplier credit. C.w. and s.s.b. should be scored separately.

Exchange: RS(T) and QSO number starting with 001. Club members will identify by including IPA and their state if in the U.S. Non-members in the U.S. will also include their state.

Scoring: One point per QSO; 5 points if its with an IPA station. Multiply total by DXCC countries and U.S. states worked on each band with an IPA station.

Frequencies: C.W.—3575, 7025, 14075, 21075, 28075. S.S.B.—3650, 7075, 14295, 21295, 28575. DX—3775, 3800, 7075, 7100. (U.S. on 40 and 80?)

Awards: Certificates to the three highest scorers in each class and each mode. Contest contacts can be applied to the Sherlock Holmes Award and Trophy *(requirements were not given).*

Stateside stations can get additional information by sending a large s.a.s.e. to Thomas D. Jenkins, WA8VDC, 4828 Elm Street, Newport, MI 48166.

Mailing deadline for contest logs is December 31st, and they go to: Anton Kohten, DK5JA, P.O. Box 40 0163, D-4152 Kempen 1, West Germany.

Delaware QSO Party

1700Z Sat. to 2300Z Sun., Nov. 10–11

The Delaware ARC is again sponsoring this party with rules the same as they have been for the past couple of years.

Stations may be worked once per band and mode for QSO and multiplier credit.

Exchange: QSO no., RS(T), and QTH. County for DE stations, ARRL section or country for others.

Scoring: DE stations score one point for each QSO. Multiply total by number of ARRL sections and DX countries worked. Others get 5 points for each DE contact. Multiply total by the number of DE counties worked on each band and on each mode (maximum of 36 multipliers possible). There are three DE counties: Kent, New Castle, and Sussex.

Frequencies: C.W.—1805, 3570, 7070, 14070, 21070, 28070. S.S.B.—1815, 3975, 7275, 14325, 21425, 28650. Novice—3720, 7120, 21120, 28120.

Awards: Appropriate awards will be given to the top scorers. In addition, certificates will be awarded to all stations working all three Delaware counties. Include two 20¢ stamps and an address label with your application for the "WDEL" award.

Mailing deadline for all entries is December 17th, and they go to Charles Sculley, AE3H, 103 E. Van Buren Avenue, New Castle, DE 19720. Include an s.a.s.e. for a copy of the results.

Czechoslovakian Contest

0000 to 2400Z Sun., Nov. 11

This is a world-wide-type contest, so do not confine your activity to working Czechs only.

All bands may be used, 1.8 through 28 MHz, phone and c.w. The same station may be worked once only on each band, phone or c.w., for QSO and multiplier credit.

Classes: Single operator, both single and all band, and multi-operator all band only. Club stations are considered multi-operator.

Exchange: RS(T) plus two figures indicating your ITU Zone.

Scoring: One point per QSO; 3 points if it's with a Czech station. Multiply total QSO points by sum of ITU zones worked on each band for your final score. (Own country may be worked for multiplier credit but no QSO points.)

Awards: Certificates to the top-scoring station in each class in each country. (The Czechs are looking for more stateside participation before making awards by districts in the USA.)

The "100 OK" and "S6S" awards are available for contest contacts in lieu of QSL cards if you include a written application with your contest entry.

Use a separate log for each band, and include a summary sheet showing the scoring and the usual signed declaration that all rules and regulations have been observed.

Mailing deadline for all entries is December 31st to: The Central Radio Club, P.O. Box 69, 11327 Prague 1, Czechoslovakia.

Montana QSO Party

1700Z Sat. to 0400Z Sun., Nov. 10–11
1700Z Sun. to 0100Z Mon., Nov. 11–12

The Yellowstone Radio Club of Billings, MT is conducting this one. *(I don't recall having listed this one before. Good luck.—ed.)*

The same station can be contacted on each band and mode; MT to MT QSOs are permitted for QSO and multiplier credit, and mobiles can be worked in each county change.

Exchange: RS(T), QSO no., and QTH. County for MT stations; state, province, or DX country for others.

Scoring: One point for phone contacts; 2 points for c.w. MT stations multiply total QSO points by number of states, VE provinces, DX countries, and MT counties worked. Others use MT counties for their multiplier (maximum of 56).

Frequencies: C.W.—1810, 3540, 7035, 14035, 21035, 28035. Phone—1835, 3905, 7285, 14285, 21385, 28585.

Awards: None were mentioned, but I'm sure top scorers will be acknowledged.

Mailing deadline is December 15th to: Yellowstone Radio Club, 2626 Burlington, Billings, MT 59102.

QRP Club C.W. Contest

0000Z Sat. to 2400Z Sun., Nov. 17–18

Sponsored by the CW Operators QRP Club, contesters may work DX and their own country. QRO stations are invited to participate, but they are limited to working QRP stations only.

Power for QRP stations must not exceed 5 watts output, 10–160 meters, for both single and multi-operator, single or all band.

Exchange: RST plus three-figure QSO number (001, etc.). QRP stations will ID in the exchange.

Scoring: Each QSO on each band using

1 watt or less	6 points
1 to 2 watts	5 points
2 to 3 watts	4 points
3 to 4 watts	3 points
4 to 5 watts	2 points
Over 5 watts	1 point

Multiplier: Each different IARU Zone worked on each band. *(Suggest stations give their zone in the exchange.—ed.)*

There is a bonus of 1.5 for field stations using battery, solar, wind, or hand generated power (no motor generator).

Final Score: Total QSO points × IARU zones from each band × bonus if any.

Awards: Certificates to the highest scoring single and multi-operator stations in each country, in each section, for both QRP and QRO, and to the top-scoring QRP Club member.

Stations can compete for any 24 hour consecutive period or for the full 48 hours.

Include a summary sheet showing the scoring, station description, and a signed declaration with your entry. Logs must be received no later than February 26, 1985 by the Contest Manager, P.O. Box 109, Mt. Druitt, N.S.W. 2770 Australia.

Missouri QSO Party

0001Z Sat. to 1800Z Sun. Nov. 17–18

The Northland ARA is again sponsoring this party, but unfortunately they moved it to a week later, right on the same weekend as the ARRL Phone Sweepstakes.

The same station can be worked on each band and mode (no 30 meters), mobiles in each county change, and MO to MO contacts are permitted for QSO and multiplier credit.

Exchange: RS(T) and QTH. County for MO stations; state, VE province, or DX country for others.

Scoring: Two points for phone QSOs; 5 points if on c.w. MO stations multiply total by states, provinces, DX countries, and MO counties worked. All others use MO counties for their multiplier (maximum of 115).

Frequencies: C.W.—1805 and 10 kHz up from band edges. *(Only looking for Extra class?—ed.)* Novice—25 kHz up in Novice bands. Phone—1835, 3963, 7230, 14280, 21380, 28570, 145.43 (no repeaters).

Awards: Certificates to top scorers—phone, c.w., and Novice—in each state, VE province, and DX country. A plaque to the "Top Banana" in Missouri.

Mailing deadline for logs is December 1st to: Northland ARA, P.O. Box 6710, Kansas City, MO 64123.

ARRL 160 Meter C.W. Contest

2200Z Fri. to 1600Z Sun
Nov. 30 to Dec. 2

This is the 15th year for this top-band activity. Exchanges will be between stateside and VE and DX stations. DX to DX contacts, however, are not permitted.

Classes: Single operator and multi-operator.

Exchange: RST and your ARRL section; country for DX and ITU region for maritime mobiles.

Scoring: Contacts between stations in ARRL sections count 2 points, with DX stations 5 points.

Multiplier: Determined by the number of ARRL sections plus VE8/VY1 (maximum of 74) and DX countries worked (for W/VE participants). (DX use ARRL sections only.)

Final Score: Total QSO points times the ARRL section and DX multiplier.

Awards: Certificates to the top-scoring single operator station in each section and DX country, and to the top-scoring multi-operator station in each ARRL division and continent.

The ARRL 160 band plan requires that W/VE stations transmit only in the 1800–1825 and 1830–1850 kHz segments, keeping the "DX Window" (1825–1830 kHz) clear for DX stations. They will indicate where they will be listening for cross-frequency contacts.

The usual grounds for disqualification—violation of rules, excessive duplicate contacts, etc.—will prevail.

Logs with more than 200 QSOs must include dupe sheets. A large s.a.s.e. to the ARRL will get you the necessary forms to make log keeping easier.

All entries must be postmarked no later than January 4th and go to: ARRL Communications Dept., 160 Contest, 225 Main Street, Newington, CT 06111.

Telco. Pioneers QSO Party

1900Z Sat. to 0500Z Mon., Dec. 1–3

This is the 20th annual party organizec by the Telephone Pioneers of the U.S. anc Canada. This year's party is again being sponsored by the John D. Burlie Chapter #89 of Columbus, Ohio.

Members may be contacted on each band and each mode if they are in different chapters, but only one contact is permitted between stations in the same chapter.

Exchange: QSO no. and chapter number (ITPA chapters, name only).

Scoring: One point per QSO on each band and mode, and one multiplier for each different chapter worked. Chapters are counted once only. There are 98 TPA and 10 ITPA chapters.

Frequencies: Phone—3915, 7275, 4285, 21375, 28705. C.W.—3575, 075, 14075, 21075, 28075. Plus or minus 20 kHz. Also u.h.f. 50–54, and Novice/Tech., and RTTY bands.

Awards: None were mentioned, but here probably are awards for high-scoring individual stations and clubs. Log sheets may be obtained from your Radio Club Coordinator or Administrator. Mailing deadline for all entries is January 5th, and they go to: John D. Burlie Chapter #89, Att: Ted Phelps, W8TP, 6200 East Broad Street, Columbus, OH 43213.

OPS Activity Contest 3.5 MHz C.W.

1800Z Sat. to 1800Z Sun., Dec. 1–2

TOPS is an international club for c.w. enthusiasts founded in Great Britain in 1946. Their objective is to encourage c.w. operation on the top bands.

Classes: Single operator, multi-operator, and QRP (5 watts or less input).

Single operator stations must take one break of 7 hours during the contest period; multi-operators can operate the full 24 hours.

Exchange: RST plus a three-figure QSO number starting with 001. TOPS members will also include their membership number.

Scoring: QSO's within own country, 1 point, in own continent 2 points, with other continents 6 points. Work a TOPS member and get 2 bonus points (members get 3 points).

Each call area in W, VE, VK, PY, U, and JA will count as a separate country for scoring. The multiplier is determined by prefixes worked (same as *CQ* WPX Contest).

Final Score: Total QSO points times the total number of prefixes worked.

Frequencies: Operation will be between 3500–3585 MHz, with the lowest 12 kHz reserved for out-of-continent DX contacts only. (When sending CQ send TAC, not Test.)

Awards: At least 15 certificates will be awarded based on the top scores in each class.

Logs must be received no later than January 31st and go to: Bertil Arting, SM3VE, Bergesvegen 26, S-823 00 Kilafors, Sweden.

(Last year out of 175 single operator entries W@ZV #154 was the only U.S. entry. To encourage more entries, an award will be sent to all who include $1.00 to cover expenses, regardless of score. The final results will be sent to all entries via bureaus, or direct if you include one IRC with your entry.)

Spanish CW DX Contest

1600Z Sat. to 1600Z Sun., Dec. 1–2

It's the world working the Espanoles with separate weekends for phone and c.w. Only single operator operation is permitted, all bands 3.5 through 28 MHz.

Exchange: RST plus a three-figure QSO number starting with 001.

Scoring: Contacts between EA stations and the following prefixes are worth 3 points: DU, CE, CM/CO, CP, CX, HC, HI, HK, HP, HR, KP4, LU, OA, PY, TG, TI, XE, YN, YS, YV, ZP, or equivalent prefixes.

Between EA and all other non-Hispano and non-European countries, 2 points.

Between EA and Europeans, 1 point (WAE boundaries).

Multiplier: For EA, each DXCC country worked on each band. All others use EA call districts worked on each band.

Final Score: Total QSO points from all bands times the multiplier from each band.

Awards: Gold, Silver, and Bronze medals to the first 3 places, phone and c.w., in Spain and to overseas winners. Certificates to first-place winners in each country. A minimum of 100 points is required to qualify.

Include a summary sheet with your log showing the scoring and other pertinent information, the usual signed declaration that rules and regulations have been observed, and your name and address in block letters.

Your entry must be postmarked no later than February 15th to: U.R.E. International Contest, P.O. Box 220, Madrid, Spain.

Hungarian C.W. Contest

1600Z Sat. to 1600Z Sun., Dec. 8–9

It's the world working the HA's on all bands 3.5 through 28 MHz on c.w. only.

Operation will be in three classes: Single operator, single band and all band, and multi-operator all band. (Club stations are considered multi-operator.)

Exchange: RST plus a contact number starting with 001. In addition, the HA's will send two letters to identify their county (BA, BP, BE, BO, CS, FE, GY, HA, HE, KO, NO, PE, SA, SO, SZ, TO, VA, VE, ZA, total of 20 on each band).

Scoring: One point for each HA contact, and a multiplier of one for each different county worked on each band. (Same station may be worked once on each band for QSO and multiplier credit.)

Final Score: Total QSO points from all bands times the sum of the county multiplier from each band.

Awards: Certificates to the first place winners in each class in each county.

Include a summary sheet with your entry including the usual signed declaration. Send within six weeks from the end of the contest to: Radio Amateur League of Budapest, P.O. Box 2, H-1553, Budapest, Hungary.

ARRL 10 Meter Contest

0000Z Sat. to 2400Z Sun., Dec. 8–9

This is the 12th annual 10 Meter Contest organized by the ARRL.

It's a worldwide activity in which DX stations are permitted to work other DX stations. You are not limited to working W/K's and VE's only.

The same station may be worked once on phone and again on c.w.; no cross-mode, however. A maximum of 36 hours operating time is permitted out of the 48-hour contest period for all stations.

Categories: Single operator, mixed mode, phone only or c.w. only. Multi-operator mixed mode only.

Exchange: W/VE stations (including KH6 and KL7) send RS(T) and state or province. DX stations (including KH2, KP4, etc.) send RS(T) and QSO number starting with 001. Maritime mobiles send RS(T) and ITU region. Novice and Tech. stations must identify /N or /T.

Scoring: Phone QSOs are worth 2 points, c.w. 4 points, and Novice 8 points.

Multiplier: Fifty U.S. states, VE call areas, DX countries, and ITU regions.

Final Score: Total QSO points times the state, province, DX country, and ITU region multiplier.

Awards: Certificates to the top single operator in each category for each ARRL section and DX country, and to the top multi-operator station in each ARRL division and each continent.

Indicate the multiplier only the first time it is worked. Dupe sheets are required for logs with 500 or more QSO's. The usual disqualification criteria will be observed. A large s.a.s.e. will get you log and instruction forms. Mailing deadline for all entries is January 12th to: ARRL Communications Dept., 10 Meter Contest, 225 Main Street, Newington, CT 06111.

CQ
The Radio Amateur's Journal

FCC NEWS

BILL GRENFELL, W4GF

Expansion of the 75, 15, and 10 meter amateur telephone sub-bands became effective 0001 UTC, September 1, 1984. 7075-7100 kHz, which has heretofore been available for telephony only outside Region 2, is now also available for telephony to those U.S. Amateur stations located in Region 2 which are west of 130 degrees West longitude (97.61(b)(11)),e.g. Alaska and Hawaii. The expanded telephony sub-bands are: 3750-4000 kHz, Extra Class; 3775-4000, Advanced; 3850-4000, General Class; 21,200-21,450 kHz, Extra Class; 21,225-21,450, Advanced; 21,300-21,450 General; 28,300-29,700 kHz, Extra, Advanced and General Classes.

On July 12, 1984, FCC Adopted a notice proposing to make the 7100-7300 kHz band available for assignment to U.S. International Broadcast stations in Region 3. A petition to amend Section 73.702(f) of the broadcast rules to authorize that band, in addition those already authorized therein, was filed by the licensee of International Broadcast station KTWR, Agana, Guam. The Commision stated: "It appears that amendment of Section 73.702(f) as requested could increase flexibility for Commission Licensed stations in Region 3 and ease congestion for continental U.S. international broadcast stations".... "In order to protect the Amateur Radio Service in Region 2 from objectional interference, a footnote is included in the proposed rule change that would prohibit FCC licensed international broadcast stations in Region 3 from transmitting to zones and areas of reception in Region 2. "If adopted it would be the intention of the FCC to review proposed broadcasting use of this band in Region 3 to insure that the intent of the footnote is complied with. Outside of Region 2, 7100-7300 kHz is allocated exclusively to Broadcasting. Interested parties may file comments on MM Docket No.84-706 on or before September 24, 1984 and reply comments on or before October 24, 1984, with FCC, Washington, D.C. 20554.

An amateur Third Party Traffic Agreement with St. Christopher, Nevis, Anguilla and The United States was effective August 8, 1984.

Effective June 17, 1984, the FCC suspended the Advanced Class Amateur Radio Operator License of Dave H. Meehan (W7IVK), Las Vegas, NV for one year. The Commission began proceedings against Meehan on May 18, 1984, for wilfully interfering with the communications of wother Amateur operating in the vicinity of the frquency 7255 kHz, in violation of Section 97.125 of the Commission's Rules. After the beginning of the proceedings, Meehan agreed to a one year suspension and to being restricted (after the suspension) from operating in the frequency band from 7235 to 7290 kHz.

Sideband Technology, Inc. (STI) has petitioned FCC for "reallocation of 6 MHz of the 216-222 MHz band to the private land mobile radio services for narrowband systems using 5 kHz channeling". FCC indentifies the petition as RM 4831. STI referred to a National Telecommunications and Information Administration draft report (NTIA-TR-81-85) statement that "a spectrum resource assessment of the 261-225 MHz band points out that generally, the....band is not extensively used throughout the United States". "The ARRL Letter" (08/16/84) advises that the NTIA report states "the Amateur Service is the heaviest user of the 220-225 MHz band". STI recommends: "The spectrum 220-222 MHz be dedicated to 5 kHz narrowband channels", and proposes "The narrow band techniques would share this band with the Amateur Service". In last months Highlights I reported on the Land Mobile Communications Councils RM-4829 petition which included the statement that "....the band 220-225 MHz may prove to be valuable for future land mobile operations". Several individuals and Amateur organizations are filing objections on both petitions with FCC.

On 08/28/84, FCC released an order dismissing a petition filed by a Corpus Christi amateur to allow novice licensees to use voice emissions from 223.40 to 223.75 MHz. Petitioner Mark W. Earle reasoned that this would allow more novice operator participation in disaster and civil defense communications activities since most such communications are carried out on VHF-FM. Dismissing the petition as premature, FCC's Private Radio Bureau Chief stated that "The spectrum requirements for the 220-225 MHz band are currently undefined. He referred to the frequency allocations resulting from the World Administrative Conference (Geneva, 1979 and the fact "....that both the FCC and the National Telecommunications and Information Agency (NTIA) are studying possible uses of the 216-225 MHz spectrum. "Thus, it is not appropriate to consider petitions which could have a major impact on the 220 MHz band until these matters have been resolved".

The Amateur Station License and Operator Licenses of Calvin C. Plageman, WD6DSV, were ordered revoked and suspended for one year for willfully or maliciously interfering with communications of other amateur stations (via WB6WLV/R). This action was taken by a Summary Decision of Administrative Law Judge Thomas J. Kilpatrick, effective Septmber 19, 1984. "In the event exceptions are not filed within 30 days of the release of this Summary Decision and the Commission does not review the case on its own motion, this Summary Decision is to become effective fifty (50) days after its public release...." (July 31, 1984). Plageman admitted his interference was willful but argued it was not malicious. The rule 97.125 prohibits willful or malicious interference. "The revocation of the license of station WD6DSV is expressly without prejudice to Plageman's refiling of an appliction after expiration of the one-year period following revocation".

The ARRL has asked the FCC to "exercise Federal Preemptive Authority over state and local zonning regulations which affect transmitters and antennas used by Amateur Radio operators". On July 16, 1984, the ARRL filed a Request for Issuance of Declaratory Ruling on this matter. The League "seeks a declaratory ruling preempting all local ordinances which provably preclude or significantly inhibit effective, reliable amateur communication, and which are not clearly necessary to incure the safety of a proposed antenna installation". FCCs "Private Radio Bureau seeks comments on this filing. "Parties wishing to file formal comment on the issues raised therein should do so by filing an original and four copies with the Secretary, Federal Communications Commission, 1919 M Street, N.W. Washington, D.C. 20554, on or before November 9, 1984. Reply comments may be filed on or before December 14, 1984. Comments and reply comments should refer to the following number: PRB-1".

Legislation which would add willful or malicious interference as one of the list of criminal offences in the Communications Act, may be introduced in congress by congressman Jim Bates of California. "Jamming" other Amateur station transmissions and cheating on an Amateur examination can bring loss of license and "you can say goodbye to Amateur Radio" FCC Private Radio Bureau Chief Robert Foosaner advised during his speech at the recent ARRL National Convention. Citing the case of Gary Kerr, ex-WA6JIY, who lost his license for jamming and who hasn't paid his $2,000 fine, Foosaner observed that "....if he doesn't shape up he's going to be looking at you from behind bars". (Westlink Report, August 10, 1984).

The arrival of the Olympic Flame in Los Angeles on July 20 was marred by an unsportsmanlike attempt to destroy communications by premeditated, though unsuccessful malicious interference. As one ham put it, "....it appeared as though the jammers had rehearsed their performance well in advance". Having been forwarned, the caravan amateur communication group used a contingency plan which "....paid off handsomely, with the jamming attempt having no discernable impact on amateur communications for the run". (Westlink Report, August 10, 1984).

Harold Claypoole has been placed on three years probation by the U.S. District Court "....on condition that he cease violating radio regulations and not speak over the air on any radio equipment without prior approval of the FCC". Formerly N6BII, Claypoole has a history of deliberate and malicious interference dating back to 1961.

On the 6th of July this year, David Saks, WD4SHP, pleaded guilty to a reduced charge of using amateur radio to transmit "obscene, indecent and profane language". The original charge had been a felony. "Saks will not be sentenced until a presentencing report is submitted to the judge in the case for review". (Worldradio, September, 1984).

Effective September 12, 1984 amateur stations operating between 420 and 450 MHz, running over 50 watts pep output, and located within 124 miles of Warner Robbins Air Forse Base, Georgia and Goodfellow A.F.B. in Texas are required to coordinate their operations in advance with the FCC district engineer-in-charge and with military area frequencty coordinator. FCC Amateur rule section 97.61(b)(7) has been appropriately amended.

The common emergency frequency

allocated for intercommunication in, or within 50 nautical miles of Alaska by amateur and most other classes of H.F. stations in Alaska has been changed from 4383.8 kHz to 5167.5 kHz. Section 97.61 and 97.107 of the Amateur Rules have been modified to include the following conditions: "The frequency 5167.5 kHz, maximum power 150 watts, may be used by any station authorized under this part to communicate with any other station authorized in the State of Alaska for emergency communications. All stations operating on this frequency must be located in or within 50 nautical miles of the State of Alaska. The frequency 5167.5 kHz may be used by licensees in the Alaska-private fixed service for calling and listening, but only for establishing communication before switching to another frequency". No airborne operations will be permitted on this frequency, and only ssb is authorized.

The FCC has recently rejected a petition requesting establishment of a "No-Code" Amateur Operator License. In his 8/2/84 Order, FCC Private Radio Bureau Chief Robert Foosaner referred to the Commissions PR Docket No. 83-28 proceeding in which it "....considered the actual usage of Morse code in all bands". The slow speed Morse code requirement for entry into the Amateur Radio Service was found not to constitute a significant barrier to potential applicants.

A petition has been filed with FCC to permit persons failing an Amateur Operator License examination element to be re-examined on that same element within seven days instead of the present 30 day wait. It is identified as RM-4835, and was received on 7/23/84 from Phil Miller, KB8QX of Charleston, WV.

FCCs Gettysburg, PA Licensing Division has commended all current VECs on the way they are handling their paperwork. Two groups were credited with submitting perfect paperwork that required no additional follow-up by the Gettysburg FCC staff. (Westlink Report, 8/24/84).

James W. Smith, W6VCE, has been granted a hearing before an FCC Administrative Law Judge to review the license revocation decision against him. "The FCC took action against Smith after one of its engineers observed W6VCE operating in violation of regulations 97.84(a) and 997.123 (identification), 97.113 (broadcasting), 97.115 (music) and 97.125 (interference). Smith wis given 30 days from the date of original service to request a hearing on the matter". He did, and the date for the proceeding was established as October 3, 1984 in San Diego, CA. (Westlink Report, 8/24/84).

Richard A. Burton, formerly licensee of amateur station WB6JAC, "....was released from federal prison the week of August 7 after serving 6 months of an 18 month term for operating an unlicensed amateur station". (Westlink Report, 8/24/84). The order of revocation and suspension of Burton's amateur station and operator licenses became effective in September of 1981. This action was based upon Burton's operation in December 1980 in violation of the following amateur rule Sections: 97.84(a) (station identification requirements); 97.85(d)(one-way communications); 97.85(e)(station control); 97.91(one-way communications); 97.113 (broadcasting prohibited); 97.125 (malicious interference) and 97.119 (transmission of obscene, indecent or profane words, language or meaning).

The FCC has proposed to shift the primary radio service allocation of the 1900 - 2000 kHz half of the 160 m band from radionavigation to radiolocation (Notice of Proposed Rule Making No. 84-874). LORAN A is an example of Radionav. and was in the 160 m band on a protected basis from the beginning of World War II until early this year, as an aid for determining the position of ships. LORAN C has been implemented on 100 kHz band, because of its superior coverage and accuracy is being used by aircraft as well as ships. Radiolocation systems, primarily used for off-shore oil exploration, have been operated within an allocation which provides 1625-1705 kHz on a secondary basis and 1705-1800 kHz on an equal basis of sharing with other services. Subject to regional planning, 1605-1705 is available for possible (AM) Broadcasting expansion. According to the ARRL however, "... the earliest time at which broadcasting could occupy its new space would be about 1990, (only) after two sessions of a Regional Administrative Radio Conference on the subject."! For example, the Commission said in its Second Report and Order in Docket 80-739 (11/08/83) that the 1900 - 2000 kHz "...allocation was made for reaccomodation purposes and not to provide additional spectrum for radiolocation needs..." and that the process should take a number of years. There appears to be little, if any, interest in the 1625 - 1705 kHz frequencies for broadcasting expansion so one may wonder what is the need for initiation of rule making at this time? One FCC official is quoted as saying "By 1990 no one may be interested in new BC frequencies!" ARRL advises that the day before the Docket 84-874 NPRM was released, it filed a Petition for Initiation of Inquiry Procedure on the present use of the medium frequency bands by non-government users. "The purpose of this inquiry is twofold: first, to define the spectrum requirements of individual users, and second, to find the number of radiolocation stations needed in a given geographical area. "The League requests that the Commission take a look at the spectrum efficiency and the technical need for the use of the 1900 - 2000 kHz by non-government radiolocation users."

ARRL has filed opposing comments on a petition seeking to amend the amateur rules to allow an applicant to re-take a license test within seven days after failing an exam. The petition was reported earlier. The League wrote: "...it is possible for an examinee to take the same test with the same questions many times, depending on how often the VEC changes the exams. Furthermore, if a VEC were to provide amateur examinations on a regular basis, it would be forced to change examinations weekly in order to ensure that the same test is not given in a successive examination session. The League also feels that amateur exam candidates should prepare for examinations in advance by studying the material rather than relying on rote memorization through repeated test-retaking." (ARRL Letter, 09/13/84).

The new "Application for Amateur Radio Station and/or Operator Licence" FCC Form 610 is now available. Dated June 10/84, availability of the new 610 was delayed by the Office of Management and Budget paperwork approval procedure and by the Government Printing Office. The new version of the 610 is geared for use by the new VEC for Technician through Extra Class operator examinations. Novice applicants and examiners are also provided for on the new version of 610. However, the examination procedure for the Novice test remains as it was before the higher classes were available via volunteer examiners. The new form should also be used for renewals and modifications. In addition to (post paid) availability from the FCCs Field Operations Bureau offices, the form may be requested from the ARRL or W5YI rpovided you include a self addressed, stamped business size envelope with the request.

A manufacturer of illegal CB equipment has been charged with violation of the Communications Act of 1934. On August 9, 1984, with the aid of personnel from the Norfolk, VA FCC Field Office, US Marshalls seized "...over $140.000 worth of illegal radio equipment destined for use in the CB Radio Service. "The equipment included numerous linear amplifiers, components and subassemblies which were being manufactured in Shelby, NC, and distributed to retailers in several states." (W5YI Report, 09/15/84).

In addition to Congressman Jim Bates, Senator Barry Goldwater has introduced legislation to make willful or malicious interference a statutory offense. Senator Goldwaters amendment to the Communications Act would add a new section; "Willful or malicious interfence" "Sec. 333. No person shall willfully or maliciously interfere with or cause interfence to any radio communication." It would also amend present section 510a by inserting "(1)" before the word "Any" and adding at the end thereof a new subsection "(2)" as follows: "(2) Any electronic, electromagnetic, radio frequency, or other device or component thereof within the control of any person accused of violating section 333 of this Act or rules prescribed thereunder, and capable of emitting the radiation alleged to violate such section or rules, may, after written notice of an alleged violation, be seized by the United States when there exists reasonable belief that seizure is necessary to prevent continued willful or malicious interference to any radio communication. Such equipment is subject to forfeiture to the United States if the operator of such equipment is determined to have violated section 333. For purposes of this subsection 'reasonable belief' shall be deemed to exist in, but not limited to, instances where continued interference is caused by use of the same or similar equipment by any person after that person has received written notice from the Commission alleging violation of section 333 and requesting that person cease the actions alleged to constitute violation of such section until a final determination is made.".

(We wish this applied to Woodpecker and other "jammers"! -Ed.) (W4GF)

EMERGENCY/TRAFFIC

Chuck Clark, K4ZN

Public Service.

Amateur Radio has survived the onslaughts of those who would like our frequencies the past seventy years because there have always been enlightened individuals in high places who have appreciated the contributions we have made. Technical contributions, right from the beginning, even Marconi said, "I've always considered myself an amateur". The competitive spirit of active amteurs was instrumental in opening new frequencies that the engineering world had written off as useless, 200 meters before World War 1, the high frequencies in the 1920s and VHF in the 1930s. In the 1940s the German High Command had occasion to regret its having stifled amateur experimentation and was burdened with radar that was less effective than that used by the Allies.

Also, in operating amateurs made contributions that grateful governments have recognized by defending our frequency allocations against those who would usurp them. Whether it's helping a sheriff searching for a lost child in the woods, or providing communication for a community isolated by storm, flood or earthquake, or assisting the Coast Guard in a maritime rescue, amateurs on number of times have earned the gratitude and support of agencies that have in their turn assisted us to continue our work.

While most amateurs are willing and eager to help when the need arises, there are some who make preparing for such emergencies their principal activity or at least give it a special place in their activities. There are those who organize VHF neets to be ready for the local emergencies, which are the most numerous and keep themselves in readiness by providing communications for events like athletic contests, parades, exhibitions. They make contact with agencies who are likely to need additional communiction facilities in an emergency and make plans to accomodate those needs.

There are the amateurs who take advantage of the fact that in Canada and the U.S. we are allowed and encouraged to handle traffic for third parties. We organized the National Traffic System and many independent nets that serve as an emergency communication system ready to take the place of the regular public system should the latter fail anywhere. As with the VHF communications, keeping these nets in working order is an ongoing job and it is affected by operating them on a regular, usually daily, basis. Canada and U.S. have the largest, most extensive system of nets. Several countries in Western Europe also have such a system which is modeled on the American NTS. Yes, amateurs in those countries still have prohibwtions against handling third-party traffic but the administrations in those countries do not consider amateur-to-amateur-to-amateu' traffic to be third party.

Then there are the amateurs whose principal activity or at least one of whose more important activities is to assist seafarers. Number of nets are in daily operation, some almost 24 hours a day in support of persons living at sea, whether by choice or to earn their livelihood. You'll find the most active group on 14,313 kHz almost anytime. There are other frequencies used: fourteen others in the 20-meter band, 21.200, 21.350, 21.390, 21.400, 21.404 and 21.407 in the 15-meter band. For local work we have: 3.750 in Northeast Canada, 3.808 in the Caribbean, 3.820 in the South Pacific, 3.935 in the Gulf of Mexico, 7.080 in the Atlantic, 7.230 in the Caribbean, 7.235 in Baja California, 7.268 on the East Coast of the U.S., 7.285 in Hawaii and 7.292 in Florida. Many boaters say that if they were limited to one radio it would be an amateur transceiver, because it is the most dependable. Any time, anywhere in the world, you can raise an amateur if you need help. True, the Cost Guard does not monitor our frequencies as is done for the regular maritime mobile services and even some places for CB. But there is no need. If you're in trouble, just raise an amateur almost anywhere who will relay your message to the Coast Guard and in a few minutes a Coast Guard Station will be calling you on your frequency.

Awards and Rewards

This type of amateur operating is not as productive of wallpaper as some others. You don't accumulate many QSL cards for instance. But there are some. Many nets issue certificates of membership to stations that check in regularly. High-volume traffic handlers may qualify for Brass Pounders League certificates issued by ARRL to those who have a total count of 500 or more for a calendar month. More impressive are the awards that you don't apply for such as the public-service certificates given to stations that perform outstanding service during emergencies and letters of apreciation from those who are helped by amateur radio. Most amateurs who are involved in this type of activity value its rewards more than its awards. No certificate can match the thrill you feel when you deliver a message of safe arrival to an anxious addressee who has been fearing the worst. These amateurs have discovered that the pursuit of happiness is the pursuit of an elusive quarry, that when we pursue it for ourselves we are often disappointed. But when we forget ourselves and pursue happiness for others, it takes us by surprise and we find ourselves far happier than we would have been had we been seeking it for ourselves.

In future issues, this column will discuss topics relating to mobile and marine operation, emergency communication and traffic handling. I hope it will be a two-way communication. Send your questions, observations, even criticisms, to me at Route 3, Box 800 Moncks Corner, S.C. 29461 U.S.A.

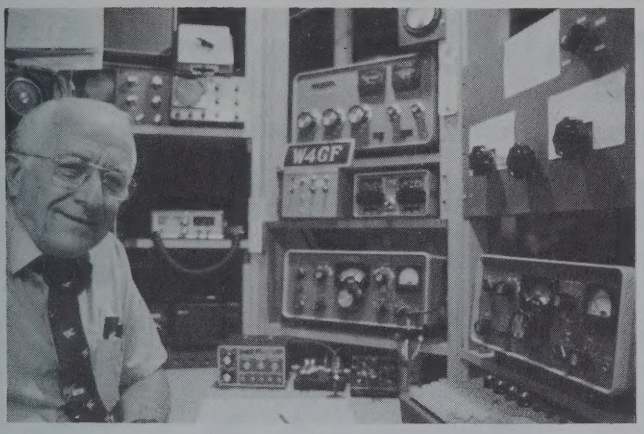
(K4ZN)

(tnx Phil Uehling, W9UP, Onaloska, Wisconsin)

At the Mepkin Abbey in Moncks Corner, South Carolina, Charles R. Clark is known as Father Benjamin, but on the air he goes by the handle of Chuck, K4ZN. An avid traffic handler, Chuck writes a regular column on the subject for *Worldradio.*

Chuck Clark, K4ZN, ex WB4OBZ was first licensed in 1939 as W8UFD, he is known as Father Benjamin a monk at Mepkin Abbey in Moncks Corner, SC and a pri urch. Chuck has been man rth Region Net, Hit and e Carolinas Novice Net r, Chuck has been Ass icial Observer.

W4GF, BILL GRENFELL



Bill was first licensed in April 1930 as W7GE at McMinnville, Oregon, also held W7BHX at National Guard Camps (1930-1939). Since 1946 held W4GF in Virginia. Pre-WW II activity included CW and phone in the HF bands and participated in Army Amateur Radio System in Oregon, Falls Church, VA, Civil Defense and Amateur Radio Emergency Corps net member.

Present Bills activities include CW and phone on HF bands 160-10 m, 2 m, fixed, land mobile and aeronautical mobile operation. He holds WAC, WAZ, DXCC (200 coutries) certificates.

Bill was involved in the series of World Record smashing operations in CQ WW Contest from Curacao and was licensee of PJØCW (1969) and PJ9GF (1970). Operated in the Multi Operator, Multi Transmitter category for four successive years: PJ3CC (1967), PJØCC (1968), PJØCW (1969), PJØFC (1970).

Bills other hobby is flying, he holds instrument rating private pilot license and flies his own Piper Cherokee airplane.

Quite a busy man in number of organizations: life member ARRL, Assistant Director, Roanoke Division; life member AMSAT; Antique Wireless Association; Aircraft Owners and Pilots Association; National Rifle Association; Northern Virginia FM Association; Potomac Valley Radio Club, past President, past Treasurer; QCWA Vic Clark Chapter; past President, Washington D.C. Chapter; past President, Northern Virginia Chapter; Radio Club of America; Treasurer, Radio Intelligence Division Association; Society of Wireless Pioneers; Theta Chi, Sigma Chapter; Quiet Birdmen; Veteran Wireless Operators Association and was active in US Navy Reserve till 1957 (LCDR).

Bill has graduated from the Oregon State College in 1935 (now Oregon State University) with B.S. degree in Electrical Engineering, Communications. Attended Navy Pre-Radar and Radar Schools, Bawdoin Coollege, Brunswick, Maine and MIT Boston, Mass.

His professional experience includes: continuously licensed commercial telegraph 2nd and telephone 1st class radio operator since 1930; Radio technician for the Oregon State Highway and Police Department Radio System 1936-1940; Assistant Monitoring Officer FCC, Radio Intelligence Division, Seattle, WA; Radio Inspector FCC Portland, Oregon Field Office and Monitoring Station; Variety of positions with FCC up to Chief Rules and Legal Branch, Acting Division Chief. Retired from FCC in 1971.

We welcome Bill aboard as a "FCC News" columnist!

ERRATUM 1983 CQ WW CONTEST

Trophy omissions:

Phone All Band - S.America, David Novoa, KP4AM Award winner is: YV3OS (Opr. Bill Ovca, N1GL)

Phone/CW, All Band - World, John Knight, W6YY Award winner is: NP4A (Opr. Andrew Blank, N2NT on phone, and Phillip Koch, K3UA on CW).

Phone/CW Single Band - World, Yuri Blanarovich, VE3BMV Award winner is: LZ2KTS (Opr. LZ2CC).

Corrections:

Phone 28 MHz Zone 14 - Europe, A.G. Anderson, GM3BCL Award winner is: DL3ZA, Friedrich Serwe.

Phone 21 MHz - Japan, DX Family Award winner is: JR1WHW, Masashi Tanaka.

CW Multi OP, Multi TX - USA, James Rafferty, N6RJ Award winner is: KN3O Station (Operators: KN3O, K2UU, N2MM, K3WJV, K3WW, N3RS, W3MM, WA3LRO)

Those were due to the 3-year trophy rule.

HIGH CLAIMED CONTEST SCORES

Please send us your High Claimed Scores from major contest for listing in RADIOSPORTING. This can be done right after the contest or after the mailing deadline. Also your notes and observations on the contest action are welcome. Tell us how it all sounded at your end!

NEXT ISSUE OF RADIOSPORTING:

In memory of W2PV.
World Contest Championship Rules.
W2PV on antennas.
Efficient manual logging in the contests.
The truth about the "truth" about SWR.
Flying "Big Bertha".

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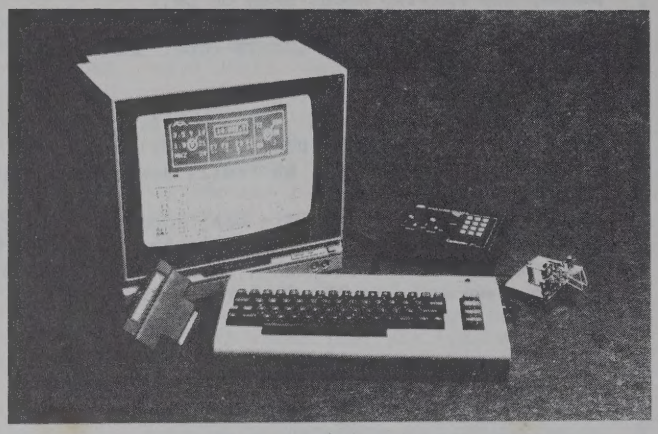

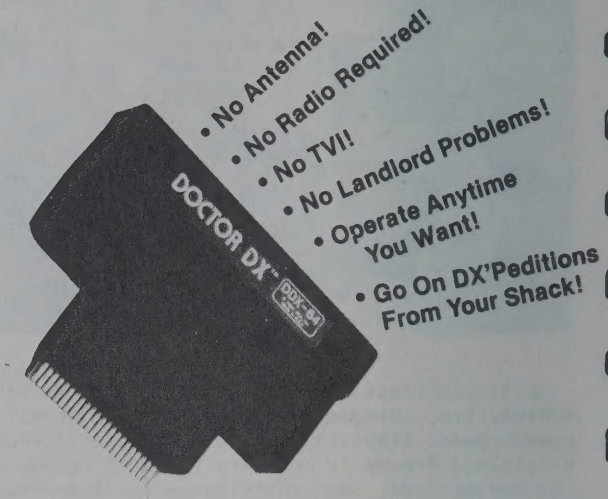
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Doctor DX simulates real H.F. CW band conditions. All the stations you will work are generated by the computer. As you tune up and down the particular band you have selected, you will hear realistic sounding stations in contact with other stations (some within your skip zone). There is also the normal QRN and QRM one would expect to hear in the real world. All call letters heard are totally random (subject to the country's callsign assignment rules). The prefixes are weighted according to the Amateur Radio population density, with 304 possible countries represented. The speed of stations operating in the lower portion of the bands is much faster than those operating in the upper band segments. The "operators" are also more polished in the lower portion of the bands.

Radio propagation (programmed for each band) represents what you would expect to hear on a good propagation day at the peak of the sunspot cycle. The propagation follows the internal real-time clock that you set before beginning operation. All the simulated stations you hear (with proper prefixes) are at distances you would expect to hear for the time of day and band selected.

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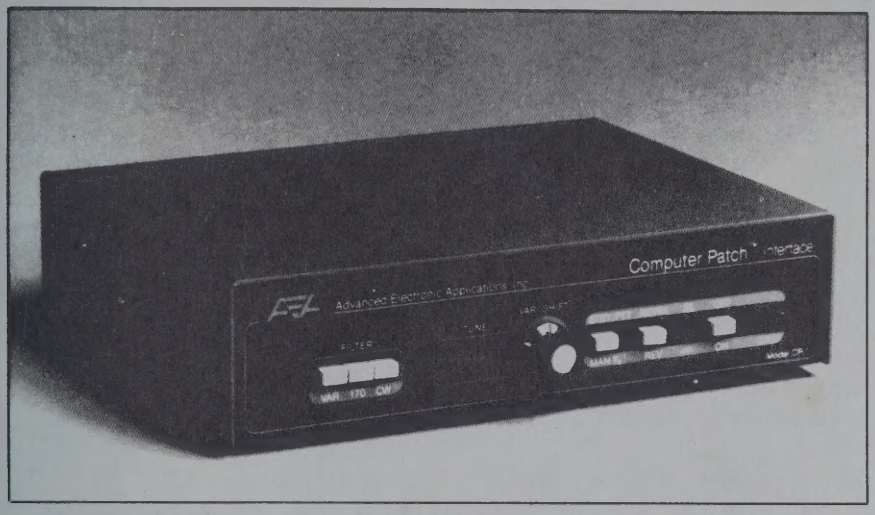

Production Expertise And Service Integrity Form The Foundation For Your Long-Term Satisfaction

The fact that the Computer Patch Interface unit by Advanced Electronic Applications, Inc. is known as the best value on the market is no accident. The CP-1 was designed by Al Chandler, K6RFK (PHD-E.E.), an active RTTY user since 1963.

Given a cost per unit budget for the CP-1, Al designed as much performance as possible into the Computer Patch, including a unique new tuning indicator, referred to by one of our customers as the "Dead Eye Dick" tuning indicator. This indicator is ideal for RTTY and CW, in that it is both fast to tune and (within 10 Hz) as accurate as scope tuning. It also performs under poor signal to noise conditions in which other indicators provide no useful data.

Al's variable shift tuning was designed to move the space filter center frequency from 2225 Hz to 3125 Hz without changing the bandwidth (by varying the Q of the filter). All this is accomplished using a precision ganged potentiometer to assure proper tracking of the multiple filter stages. We could have used a pot costing a tenth as much by simply using a two-pole filter design, but we feel the advantage of a sharper filter reduces the noise bandwidth significantly and allows the variable shift control to be used like passband tuning for extra elimination of adjacent channel interference.

Some manufacturers are concerned that amateurs might try calibrating their own equipment and, therefore, have used non-adjustable components, which results in sub-optimal performance. Although more costly, trimpots used in AEA equipment allow factory adjustment for performance to design specifications. Competently designed active filter circuits need not be adjusted after leaving the factory; however, for specialized use the owner can easily change filter parameters.

Mindful of the fact that many of our customers are new to RTTY, Al made the CP-1 tuning as forgiving as possible, while providing the most critical operator a piece of equipment in which he could be proud. Even old "pro's" are surprised at the poor signal conditions under which the CP-1 will still provide good copy.

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Purpose and objectives:

1. To promote international friendship and goodwill through the sportsmanship and radio contesting.
2. To improve the quality of amateur radio operators and operating through education and experience, by voicing the opinions of radio amateurs that are experienced and have contributed to the hobby.
3. To promote amateur radio contesting and other operating related activities as a sport, and to provide the publicity and recognition that it deserves in the public media.
4. To publish articles in the monthly magazine "RADIOSPORTING" featuring timely articles on various subjects of interest to Contesters, DXers, SWL, VHF, UHF and microwave enthusiasts, on RTTY, SSTV, Computers in communications, Fox hunting and anything of interest to the active Ham striving for self-improvement. To feature technical articles on equipment design and modifications, antenna construction, radio-wave propagation, and commercial equipment reviews by qualified people.
5. To organize as an annual event: the "International Contest Symposium" which would run in parallel (evenings) with the Dayton Hamvention, and feature timely topics with the participation of some of the world's leading amateurs.
6. To hold annual Awards Dinner with an entertainment program, where awards for various achievements will be presented.
7. To maintain and publish all time record tables for significant contests.
8. To sponsor and run a yearly International Contest Championship. From the results of a number of major contests, each year the "Contester of the Year" will be decided in various categories.
9. IRSA will administer a "Contest Hall of Fame" and vote on awarding the membership to those who have significantly contributed to the sport of contesting.
10. IRSA will coordinate and assist in the scheduling of international contests.
11. Regular weekly meetings on air will be held on 20 and 80 m. (14.199, 3.799)
12. An automatic, computer controlled bulletin station will transmit the latest DX and contest news on CW and RTTY.(14.099)
13. All in all, The IRSA will be dedicated to the pursuit of excellence and quality in Amateur radio by promoting, publicizing and leading the way.
14. Attractive numbered membership certificates and badges will be issued to members.
15. IRSA will be run by contesters who are selected for their accomplishments and it will be independent of any national or commercial organizations.
16. IRSA will assist and sponsor Contest/DXpeditions, Trophies and other radio sporting and publicity events.
17. IRSA is a non profit organization, with all proceeds to be used for financing events, awards and expenses incured and sponsored by IRSA.

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Editor Yuri Blanarovich, VE3BMV
Asst. Editor Mike Spenuk, VE3JTQ

Contributing staff:

Propagation Lee Wical, KH6BZF
Contest Calendar Frank Anzalone, W1WY
Emergency/Traffic Chuck Clark, K4ZN
Technical Dave Ingram, K4TWJ
FCC News Bill Grenfell, W4GF
Europe Jiri Kral, OK2RZ
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Canada Bob Nash, VE3KZ
USA Terry Baxter, N6CW
SWL Steve Webster
Antennas Yuri Blanarovich, VE3BMV
DXpeditioning Carl Henson, WB4ZNH

Advertising Sonya Blanarovich

Editorial offices: RADIOSPORTING
Box 65, Don Mills
ON, Canada, M3C 2R6
Tel. (416) 438-6313

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Hwy. 36 , Airport Plaza
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IRSA Officers:

President Yuri Blanarovich, VE3BMV
Directors Terry Baxter, N6CW
Frank Brooker, 9Y4VU
Sam Ford, ZS6BRZ
Dave Goodwin, VE2ZP
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Tack Kumagai, JE1CKA
Andy McLelan, VE1ASJ
Jim Roberts, VE3IY
Martin Rosenthal, VE3MR
Mike Spenuk, VE3JTQ

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Fred Laun III, K3ZO

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